# LBT-A57CD/A57CDM/A67CD/A67CDM/D509CD/D559CD/D609CD

## **SERVICE MANUAL**

REVISED

Discard your LBT-A57CD/A57CDM/A67CD/ A67CDM/D509CD/D559CD/D609CD service manual previously issued. This service manual contain it. AEP Model
LBT-D509CD/D609CD

UK Model
LBT-D559CD

E Model
LBT-A57CD/A57CDM/A67CD/A67CDM

Australian Model
LBT-A57CDM/A67CDM

These systems are composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

### COMPONENT MODEL NAME FOR LBT-A57CD/ A57CDM/D509CD/D559CD

System Component	LBT-A57CD	LBT-A57CDM	LBT-D509CD LBT-D559C				
Tuner	ST-0	709	ST-D709				
Amplifier	TA-	A57	TA-D509				
Cassette deck	TC-£	509	TC-D509	TC-D609			
Record player	-	_	_	PS-LX47P			
CD player	CDP-M43	CDP-C422M	CDP-M43 or CDP-C422M	CDP-C422M			

### COMPONENT MODEL NAME FOR LBT-A67CD/ A67CDM/D609CD

	-							
System	LBT-A67CD	LBT-A67CD LBT-A67CDM LBT-D609CD						
Tuner	ST-D709							
Amplifier	TA-	A67	TA-D609					
Cassette deck	TC-D709							
CD player	CDP-M43	CDP-M43 CDP-C422M						



### **PARTS LIST**

• Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

### Abbreviations

G : German IT : Italian EE : East European AUS : Australian EA : Saudi Arabia MY : Malaysia

SP : Singapore

Remark

### LBT-A57CD/A57CDM/D509CD/D559CD

### Ref. No. Part No. Description Remark ACCESSORIES & PACKING MATERIALS \*\*\*\*\*\*\*\*\*

1-466-983-11 REMOTE COMMANDER (RM-S509)

1-501-374-11 ANTENNA, LOOP

1-501-594-11 ANTENNA (FM) (AEP, EE, IT)

1-559-533-11 CORD, CONNECTION (UK, E, AUS, EA, MY, SP)

1-574-314-11 CORD (WITH CONNECTOR) (AU BUS) (3P-3P)

1-590-822-11 CORD (WITH CONNECTOR) (3P-11P-11P)

1-590-823-11 CORD (WITH CONNECTOR) (3P-15P-15P)

1-690-727-11 CORD (SPEAKER) (E. AUS, EA. MY, SP)

3-350-154-01 CUSHION (for TC)

3-754-847-11 MANUAL, INSTRUCTION (English, French, Spanish, Portuguese) (for CDP-C422M)

3-756-540-11 MANUAL, INSTRUCTION (English) (UK)

3-756-540-41 MANUAL, INSTRUCTION (English French. Spanish, Portuguese) (AEP)

3-756-540-51 MANUAL, INSTRUCTION (German, Dutch,

Swedish, Italian) (AEP, G, IT) 3-756-540-61 MANUAL, INSTRUCTION (English, German, Polish, Russian) (EE)

3-756-540-81 MANUAL, INSTRUCTION (English, French. Spanish, Chinese) (E, AUS, EA, MY, SP)

4-920-940-01 SHEET (A), PROTECTION (for ST, TC, CDP-M43)

4-929-563-01 CUSHION (for ST, CDP-M43)

4-934-859-01 CUSHION (for TA)

4-952-208-21 INDIVIDUAL CARTON (for ST) (LBT-D509CD)

4-952-745-01 CUSHION (R) (for PS)

4-952-746-01 CUSHION (L) (for PS)

4-958-770-01 INDIVIDUAL CARTON (for ST, TA, TC) (LBT-D509CD)

4-958-771-01 INDIVIDUAL CARTON (LBT-D559CD)

4-958-772-01 INDIVIDUAL CARTON (for TA, TC) (LBT-D509CD)

4-958-773-01 INDIVIDUAL CARTON (LBT-A57CD)

4-958-774-01 INDIVIDUAL CARTON (LBT-A57CDM)

4-958-814-01 CUSHION (FRONT) (for CDP-C422M)

4-958-815-01 CUSHION (REAR) (for CDP-C422M)

### LBT-A67CD/A67CDM/D609CD

Ref. No. Part No. ACCESSORIES & PACKING MATERIALS

1-466-987-11 REMOTE COMMANDER (RM-S609)

Description

\*\*\*\*\*\*\*\*\*

1-501-374-11 ANTENNA, LOOP

1-501-594-11 ANTENNA (FM) (AEP, EE, IT)

1-559-533-11 CORD, CONNECTION (E, AUS, EA, MY, SP)

1-574-314-11 CORD (WITH CONNECTOR) (AU BUS) (3P-3P)

1-590-822-11 CORD (WITH CONNECTOR) (3P-11P-11P)

1-590-823-11 CORD (WITH CONNECTOR) (3P-15P-15P)

1-690-727-11 CORD (SPEAKER) (E, AUS, EA, MY, SP)

3-350-154-01 CUSHION (for TC)

3-754-847-11 MANUAL, INSTRUCTION (English, French, Spanish, Portuguese) (for CDP-C422M)

3-756-541-41 MANUAL, INSTRUCTION (English, French, Spanish, Portuguese) (AEP)

3-756-541-51 MANUAL, INSTRUCTION (German, Dutch, Swedish, Italian) (AEP, G, IT)

3-756-541-61 MANUAL, INSTRUCTION (English, German, Polish, Russian) (EE)

3-756-541-71 MANUAL, INSTRUCTION (English, French, Spanish, Chinese) (E, AUS, EA, MY, SP)

4-920-940-01 SHEET (A), PROTECTION (for ST. TC. CDP-M43)

4-929-563-01 CUSHION (for ST, CDP-M43)

4-934-859-01 CUSHION (for TA)

4-952-208-21 INDIVIDUAL CARTON (for ST) (LBT-D609CD)

4-958-775-01 INDIVIDUAL CARTON (for ST, TA, TC) (LBT-D609CD)

4-958-777-01 INDIVIDUAL CARTON (for TA, TC) (LBT-D609CD)

4-958-778-01 INDIVIDUAL CARTON (LBT-A67CD)

4-958-779-01 INDIVIDUAL CARTON (LBT-A67CDM)

4-958-814-01 CUSHION (FRONT) (for CDP-C422M)

4-958-815-01 CUSHION (REAR) (for CDP-C422M)

## TA-A57/D509

## SERVICE MANUAL



AEP Model UK Model TA-D509 E Model Australian Model

This set is the Amplifier section in LBT-A57CD/ A57CDM/D509CD/D559CD.

This photo is TA-D509.

### **SPECIFICATIONS**

### **TA-A57**

Continuous RMS power output

60 W + 60 W

(6 ohms, at 1 kHz, 5% THD)

Peak music power output 750W (4 speakers driven)

In	put	Jack type	Sensitivity	Impedance
P	DEO	Phono	245 mV	47 kohms
	HONO (MM)	Phono	3.3 mV	47 kohms
	IC	Phono	1 mV	10 kohms

Audio output	Jack type	Voltage	Impedance			
SURROUND Phono SPEAKER		Accepts speakers of 16 ohms				
HEADPHONES	Stereophone	Accepts headphones of 8 of or more				

Frequency response

15 Hz to 50 kHz 30dB

Power requirements

TYPE I

120V/220V/240V AC, adjustable with the voltage selector, 50/60Hz

120V/220V/230-240V AC, adjustable with the voltage selector, 50/60Hz

Power consumption

Weight Dimensions

180W Approx. 5.9 kg (12 lbs 15 oz) Approx. 355 x 135 x 330 mm

(14 x 5 1/4 x 12 7/4 inches) (w/h/d, including projections)

Design and specifications are subject to change without notice.

#### TA-D509

Continuous RMS power output

60 W + 60 W

(6 chms, at 1 kHz, 5% THD) 50 W + 50 W (6 ohms, DIN, 1 kHz)

90 W + 90 W

Music power output

(6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
			47 kohms 47 kohms

Audio output	Jack type	Voltage	impedance			
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms				
HEADPHONES	Stereophone	Accepts headphones of 8 ohn				

Frequency response Power requirements

15 Hz to 50 kHz 30B 220-230V AC, 50/60Hz

(AEP, G, IT, EE model) 240V AC, 50/60Hz (UK model)

150 W

Power consumption Weight Dimensions

Approx. 5.9 kg (12 lbs 15 oz) Approx. 355 x 135 x 330 mm (14 x 5 <sup>1</sup>/<sub>4</sub> x 12 <sup>7</sup>/<sub>8</sub> inches)

(w/h/d, including projections)

Design and specifications are subject to change without notice.

Abbreviations

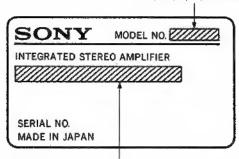
G: German model IT: Italian model EE: East European model

## INTEGRATED STEREO AMPLIFIER SONY

### **MODEL IDENTIFICATION**

-Specification Label-

E, EA, AUS, MY, SP model: TA-A57 AEP, UK, G, IT, EE model: TA-D509



AEP, IT, EE model: AC: 220V-230V~50/60Hz 150W

UK model : AC: 240V~50/60Hz G model : SYSTEM LBT-D509

AC: 220V-230V~50/60Hz 150W

E, EA, AUS model : AC: 120V/220V/240V~50/60Hz 180W MY, SP model : AC: 120V/220V/230V—240V~50/60Hz 180W

Abbreviations

EA : Saudi Arabia model
AUS: Australian model
MY : Malaysia model
SP : Singapore model
G : German model
IT : Italian model
EE : East European model

SAFETY-RELATED COMPONENT WARNING!!

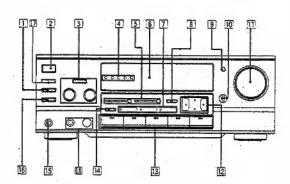
COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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### SECTION 1 GENERAL

### 1-1. LOCATION OF CONTROLS



This section is extracted from instruction manual.

2.POWER switch DYNAMIC BASS SYSTEM controls (ON OFF, FREQUENCY, LEVEL) **ISELECT 5/PERSONAL FILE setting** indicators SURROUND controls (MODE, LEVEL and indicators) Display window
CURSOR MODE buttons (EQUALIZER, SELECT 5, PERSONAL FILE and Indicators)

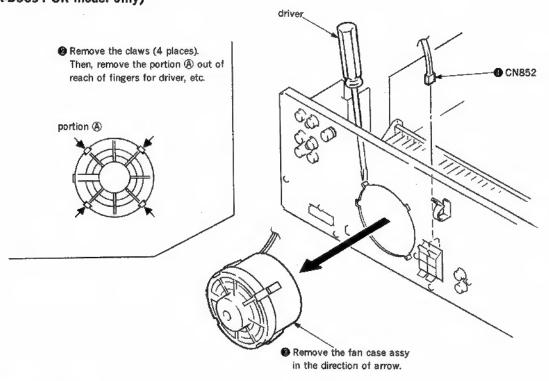
EMEMORY button and indicator DISPLAY button TO BALANCE control VOLUME control
 ©CURSOR CONTROL section EFunction selectors and indicators EQ FLAT button THEADPHONES jack EP. FUNCTION button and indicator M KARAOKE PON button and indicator (TA-A57 only) MIC (microphone) jack and MIC LEVEL control (TA-A57 only)

EFFECT button and indicator

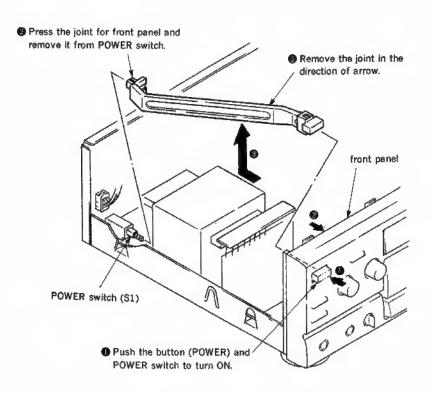
## SECTION 2 SERVICE NOTES

Note: Follow the disassembly procedure in the numerical order given.

## 2-1. REMOVAL OF FAN CASE (TA-D509: UK model only)

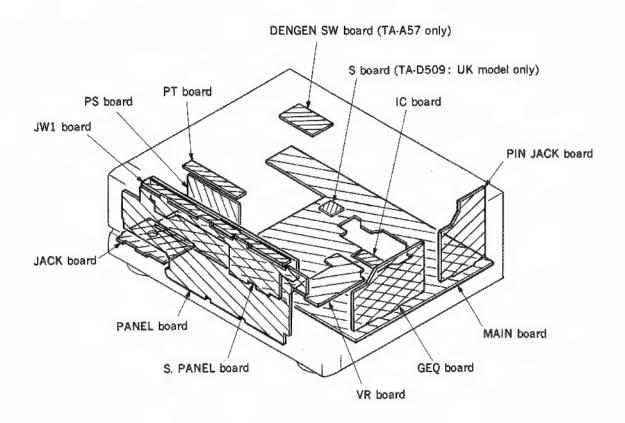


### 2-2. REMOVAL OF JOINT

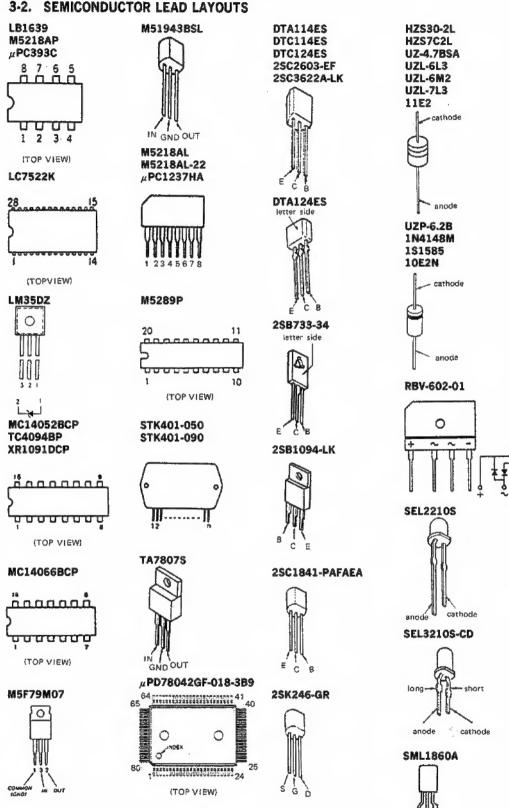


### SECTION 3 DIAGRAMS

### 3-1. CIRCUIT BOARDS LOCATION



### 3-2. SEMICONDUCTOR LEAD LAYOUTS



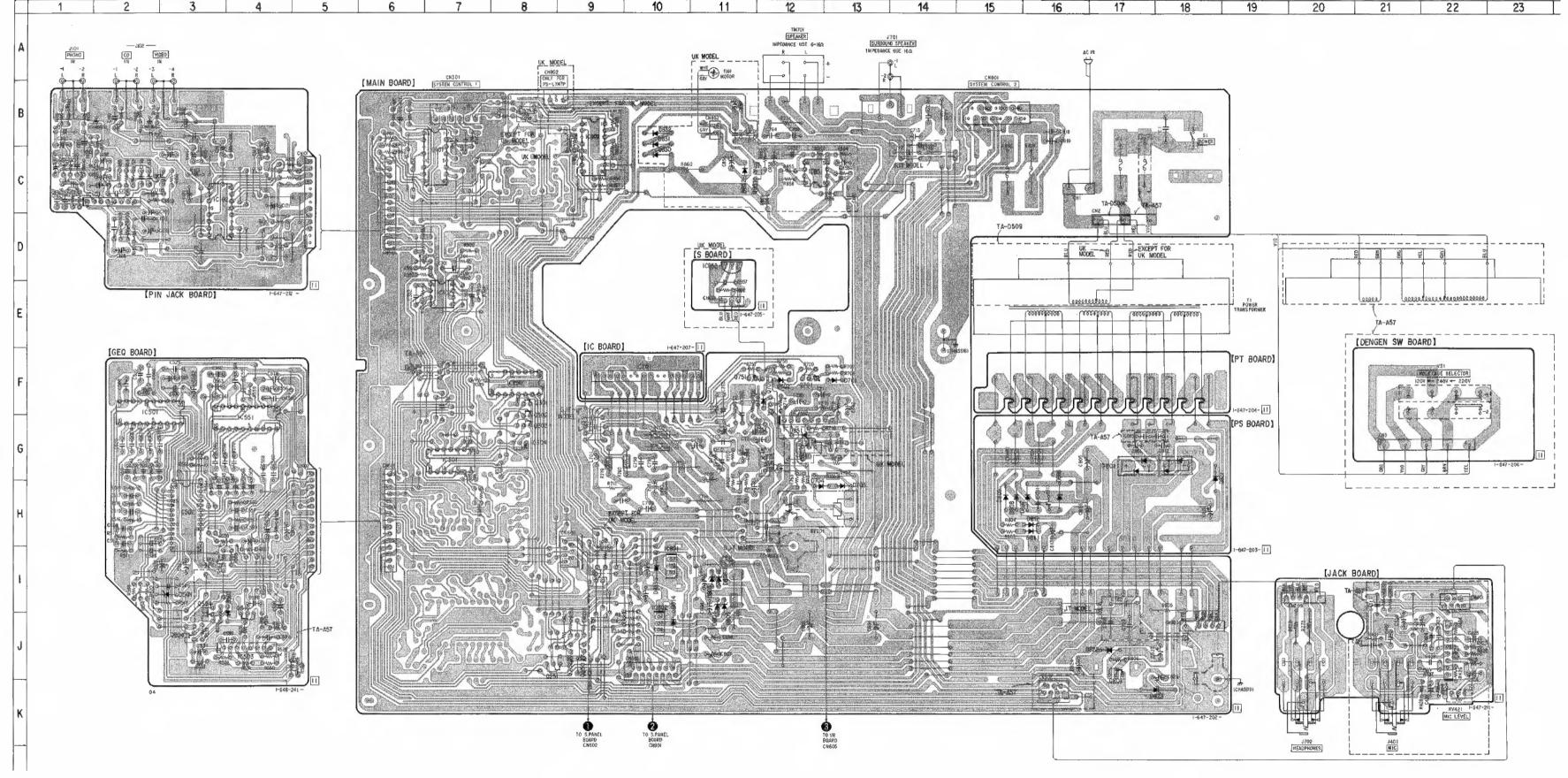
### Semiconductor Location

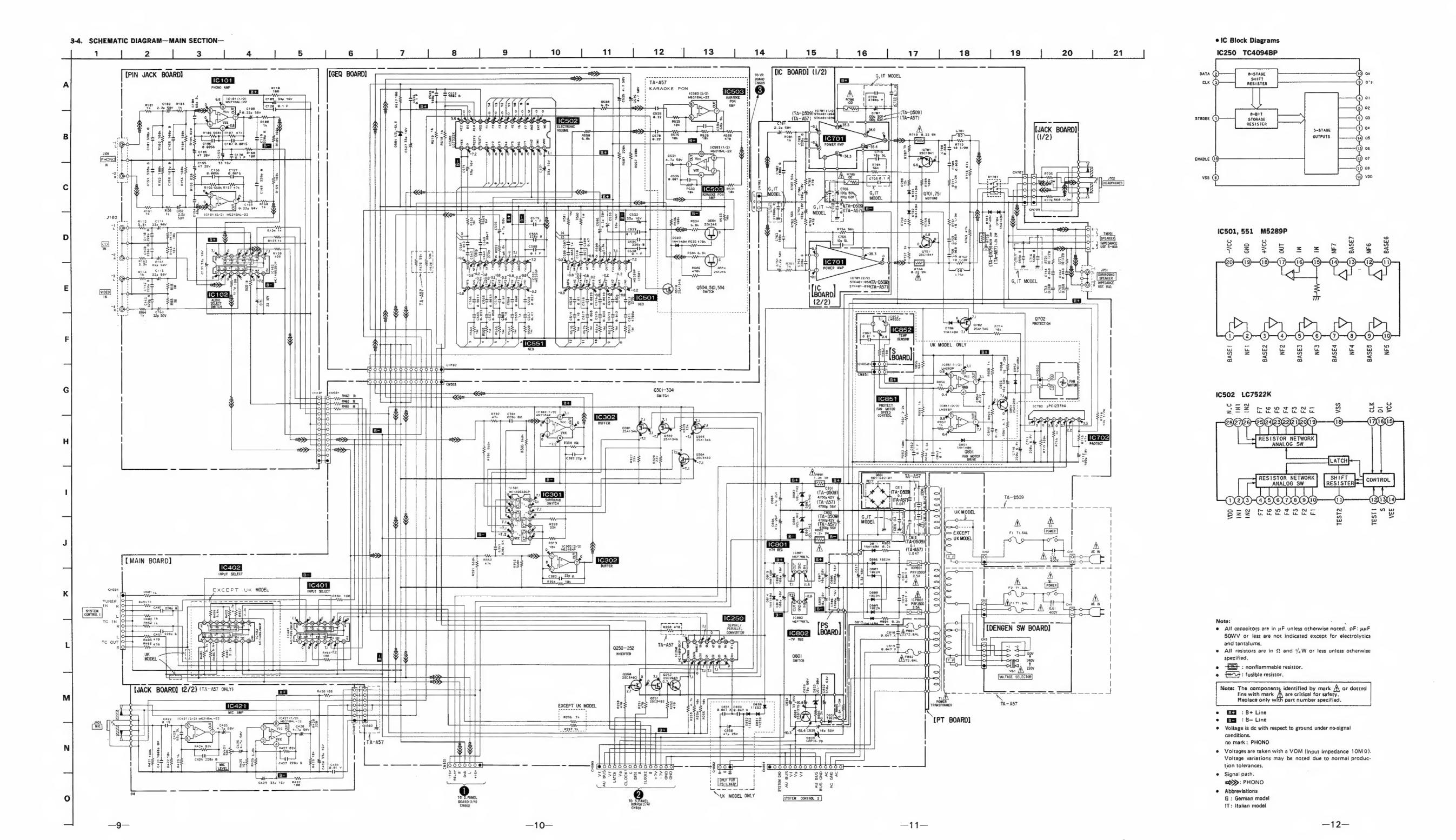
#### Ref. No. Location D501 IC301 D502 IC302 E-7 D701 IC401 F-13 C-7 D702 F-12 IC402 B-9 D703 H-13 IC421 J-22 D704 H-12 IC501 F-2 D705 F-11 IC502 H-3 D801 G-17 IC503 D802 1-11 IC551 G-4 D803 IC701 F-10 I-11 D804 1-11 IC702 G-12 D805 I-11 IC801 I-10 D806 IC802 H-16 J-10 D807 H-15 IC851 C-12 D808 H-15 IC852 D-11 D809 H-15 D811 D812 D813 Q250 H-16 H-16 Q251 J-8 1-10 0252 D814 J-10 Q301 F-8 D821 Q302 G-18 F-8 D822 J-17 Q303 G-8 D823 K-17 Q304 G-8 C-10 D830 Q504 J-3 D831 B-10 Q510 D832 B-10 Q554 D851 G-12 Q701 F-12 D852 Q702 C-11 F-12 Q751 F-11 Q801 Q851 IC101 C-2 J-17 IC102 IC250 C-3 F-8 C-11

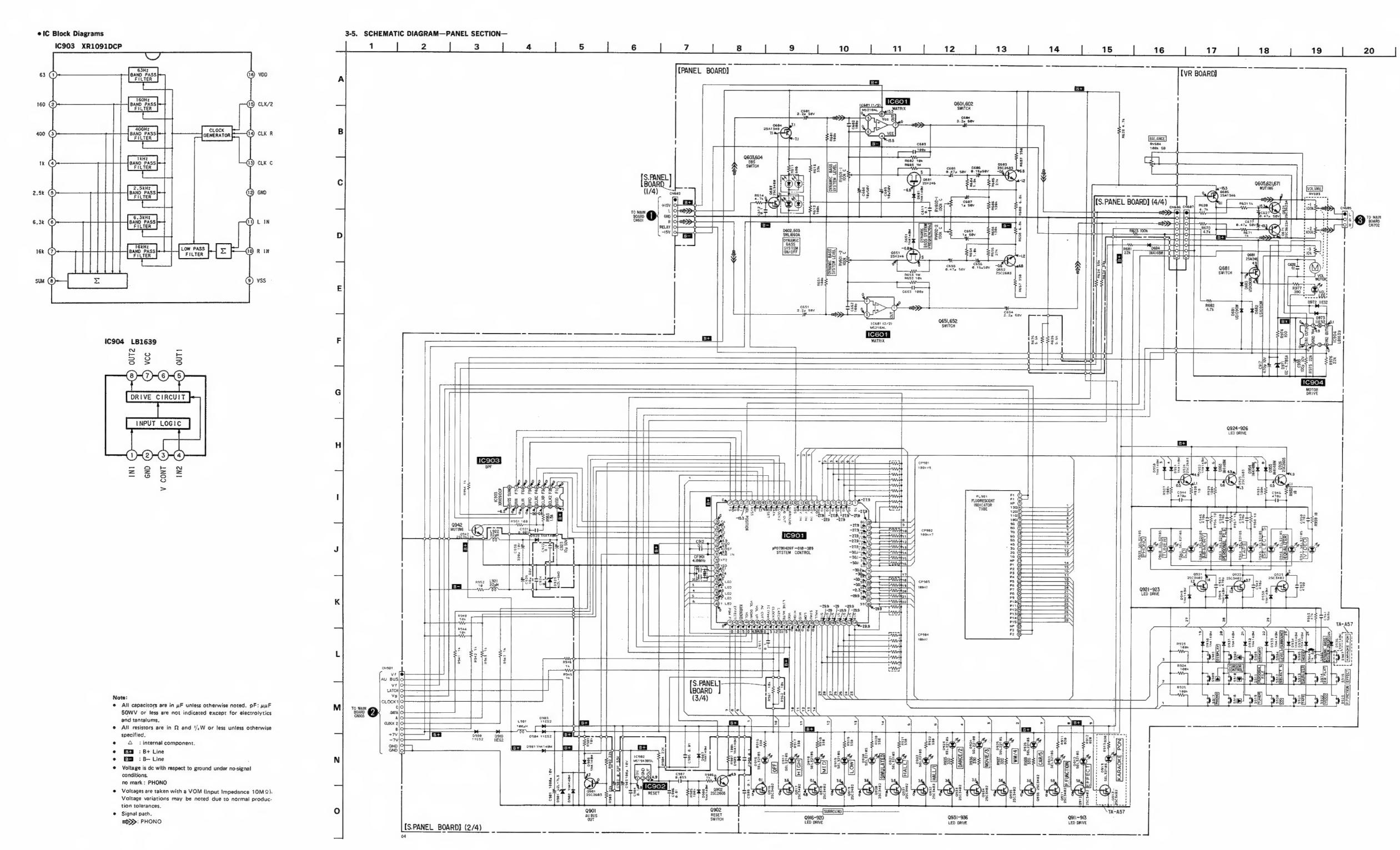
### Note:

- o---: parts extracted from the component side.
- Pattern on the side which is seen.
- Abbreviations
- G: German model
- IT: Italian model

### 3-3. PRINTED WIRING BOARDS—MAIN SECTION— • Refer to page 5 for Semiconductor Lead Layouts.

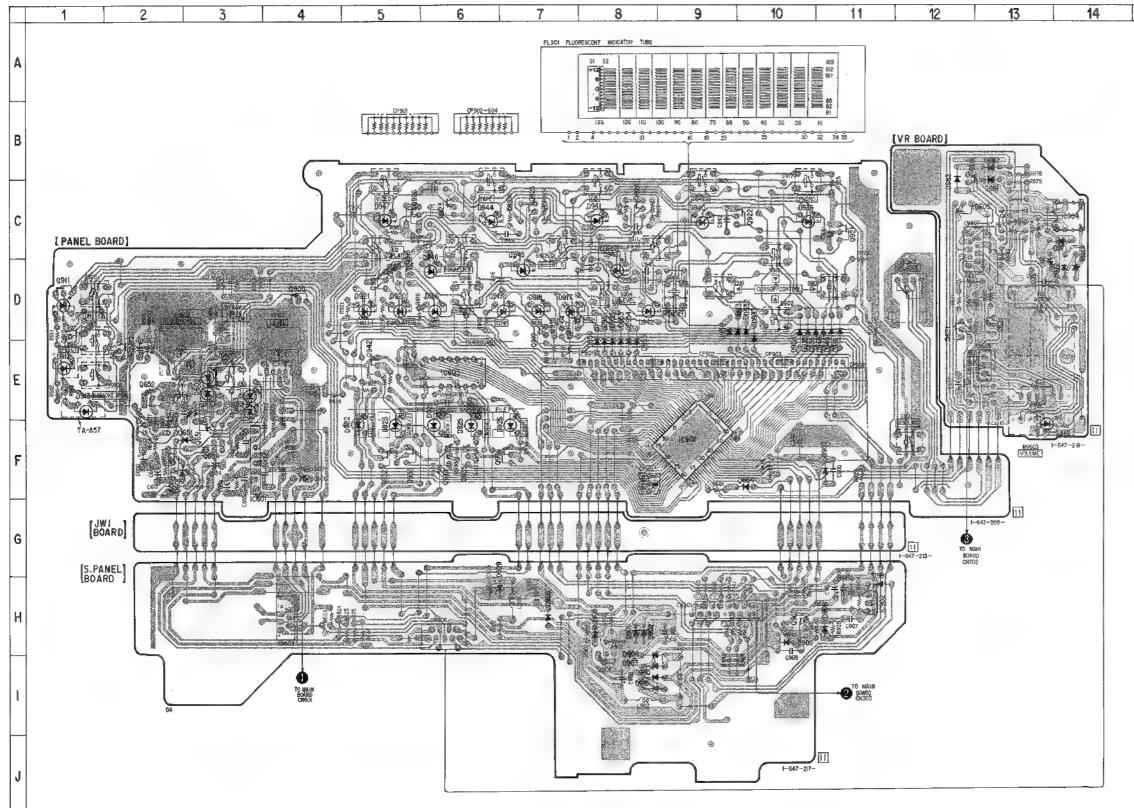






-15-

### 3-6. PRINTED WIRING BOARDS—PANEL SECTION— • Refer to page 5 for Semiconductor Lead Layouts.



### Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D601	F-2	D950	D-8
D602	E-3	D951	D-8
D603	E-3	D952	D-8
D651	F-3	D953	D-8
D681	C-13	D954	D-8
D682	B-13	D955	D-8
D683	C-12	D971	C-14
D684	F-10	D972	D-14
D901	H-8	D973	D-14
D902	H-8	D980	1-8
D903	1-8	D981	H-11
D904	H-8		
D905	H-8	IC601	F-3
D907	F-11	IC901	F-9
D908	H-11	IC902	H-11
D909	H-10	10903	E-6
D910	1.8	IC904	C-14
D911	D-1	10304	Q-1-T
D912	E-1	0601	F-2
D912	E-1	0602	F-2
	D-6	_	D-4
D916	) -	Q603	F-3
D917	D-7	Q604	
D918	D-7	Q605	C-12
D919	D-6	Q621	D-13
D920	D-5	Q651	F-3
D921	D-5	Q652	E-2
D922	F-5	Q671	D-12
D923	F-5	Q681	B-12
D924	F-6	Q901	1-8
D925	F-6	Q902	H-10
D926	F-7	Q911	D-1
D928	H-7	Q912	D-1
D929	H-6	Q913	E-2
D930	D-9	Q916	D-5
D931	D-9	Q917	D.7
D932	D-10	Q918	D-7
D933	D-10	Q919	D-7
D934	D-10	Q920	D-5
D935	D-10	Q921	C-11
D936	D-10	Q922	C-9
D938	D-11	Q923	C-6
D939	C-10	Q924	C-8
D940	C-9	Q925	C-7
D941	Ç-8	Q926	C-5
D942	D-8	Q931	D-5
D943	D-8	Q932	F-5
D944	C-6	Q933	F-5
D945	D-7	Q934	F-6
D946	D-6	Q935	F-6
D947	C-5	Q936	F-7
D948	D-11	Q942	E-5
D949	D-11		

### Note

- o----: parts extracted from the component side.
- Pattern on the side which is seen.

## SECTION 4 EXPLODED VIEWS

### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service.
   Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:

KNOB, BALANCE (WHITE)...(RED)

† †
Parts Color Cabinet's Color

 Hardware (# mark) list is given in the last of this parts list.

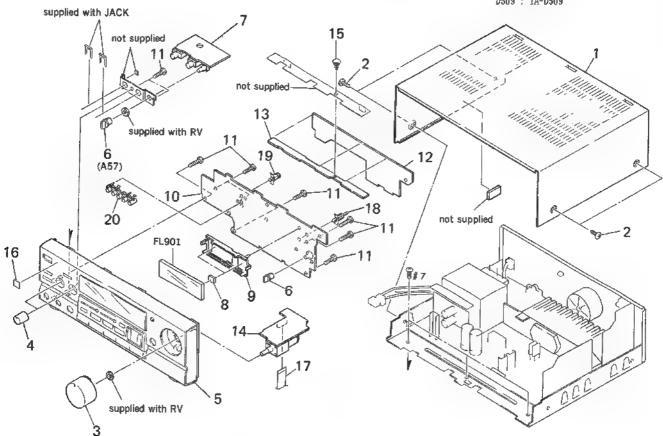
The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

### Abbreviations

G : German model
II : Italian model
EE : East European model
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model

A57 : TA-A57 D509 : TA-D509

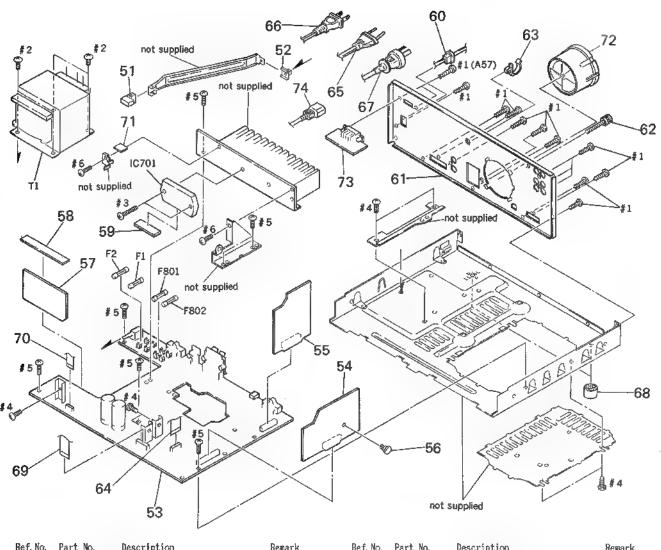
### 4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-949-912-31	CASE (AEP, E, G, IT, EE, AUS, EA)		* 10	A-4360-075-A	PANEL BOARD, COMPLETE (D509)	
* 1	4-949-912-51	CASE (UK, MY, SP)		* 10		PANEL BOARD, COMPLETE (A57)	
2	3-363-099-01	SCREW (CASE 3 TP2)	1	11		SCREW (2. 6X8), +BVTP	
3		KNOB (VOLUME) ASSY		* 12		S. PANEL BOARD. COMPLETE	
4	4-950-651-11	KNOB (DIA. 16), ROUND		* 13	1-647-213-11		
5	X-4943-439-1	PANEL ASSY, FRONT (AEP, G, IT, E	EE)	* 14	A-4360-079-A	VR BOARD, COMPLETE	
5		PANEL ASSY, FRONT (UK)		15	3-531-576-01		
5	X-4943-441-1	PANEL ASSY, FRONT (A57)		16		STICKER, SONY SYMBOL (12)	
â	4-950-652-11	KNOB (DIA. 12), ROUND		17		WIRE, FLAT TYPE (9 CORE)	
* 7	1-647-211-11	JACK BOARD		18		HOLDER, PC BOARD	
* 8	4-921-941-01	CUSHION (FL)		* 19	3-350-847-21	HOLDER PCR	
<b>*</b> 9	4-923-103-01	HOLDER, FL TUBE	İ	* 20		HOLDER (5 GANG), LED	
			10	FL901		INDICATOR TUBE, FLUORESCENT	

## The components identified by mark A or dotted line with mark. A are critical for safety. Replace only with part number specified.

### 4-2. CHASSIS SECTION



		53		NO.	t supplied	
Ref. No.	Part No.	Description	Remark Ref	. No. Part No.	Description	Remark
51	4-942-061-11	BUTTON (POWER)	6	2 4-947-010-	01 SCREW, FEEDER FIXED	
52	4-886-342-00	JOINT (B), KNOB	* 6	3 4-949-235-	01 HOOK	
<b>*</b> 53	A-4360-064-A	MAIN BOARD, COMPLETE (AEP, EE)	6	4 1-690-114-	31 WIRE, FLAT TYPE (7 CORE)	
* 53	A-4360-065-A	MAIN BOARD, COMPLETE (G, 1T)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 1-575-654-	11 CORD, POWER (AEP, G, IT, EE, EA, MY	, SP)
<b>*</b> 53	A-4360-066-A	MAIN BOARD, COMPLETE (UK)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 1-575-656-	11 CORD, POWER (E)	
<b>•</b> 53	A-4360-067-A	MAIN BOARD, COMPLETE (E, AUS, EA	) <u>A</u> 6	7 1-690-608-	11 CORD, POWER (AUS)	
• 53	A-4360-068-A	MAIN BOARD, COMPLETE (MY, SP)	6	8 4-931-169-	01 F00T	
* 54		GEQ BOARD, COMPLETE (D503)	6		11 WIRE, FLAT TYPE (15 CORE)	
<b>*</b> 54		GEQ BOARD, COMPLETE (A57)		0 1-690-992-	11 WIRE, FLAT TYPE (7 CORE) (A57)	
* 55	A-4360-082-A	PIN JACK BOARD, COMPLETE (D509	• 7	1 1-647-205-	11 S BOARD (UK)	
* 55	A-4360-083-A	PIN JACK BOARD, COMPLETE (A57)	7	2 X-4942-029	-1 CASE ASSY, FAN (UK)	
56	3-531-576-21	RIVET	* 7	3 1-647-206-	11 DENGEN SW BOARD (A57)	
• 57	1-647-203-11			4 1-575-669-	21 CORD, POWER (UK)	
• 📖	1-647-204-11		ı́∆F	1 1-532-259-	OO FUSE, TIME-LAG (T1.6A)	
* 59	1-647-207-11	IC BOARD	ÆF	2 1-532-259-	OO FUSE, TIME-LAG (T1.6A)	
· [0]	3-703-244-00	BUSHING (2104), CORD (AUS, EA, N	IY, SP, D509) 🔥 🛝 F	801 1-532-203-	OO FUSE, TIME-LAG (T2A)	
• [1]		BUSHING (S) (4516), CORD (E)		802 1-532-203-	00 FUSE, TIME-LAG (T2A)	
<b>*</b> 61		PANEL (B3120), BACK (AEP, IT, EF	) I	C701 8-749-922-	91 IC STK401-050 (D509)	
<b>*</b> 61		PANEL (B3120), BACK (UK)	I		95 IC STK401-090 (A57)	
* 61	4-957-102-31	PANEL (B3120), BACK (G)	ΤΔ	1 1-423-527-	11 TRANSFORMER, POWER (D509)	
<b>*</b> 61		PANEL (B3120), BACK (E, AUS, EA)	ΤΔ	1 1-423-528-	11 TRANSFORMER, POWER (E, AUS, EA, M	Y)
* 61	4-957-102-51	PANEL (B3120), BACK (MY, SP)	ΤΛ	1 1-423-602-	11 TRANSFORMER, POWER (SP)	

## SECTION 5 ELECTRICAL PARTS LIST

**DENGEN SW** 

GEQ

### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS

All resistors are in ohms. METAL: Metal-film resistor.

METAL OXIDE: Metal oxide-film resistor.

F:nonflammable

 Items marked "\*" are not stocked since they are seldom required for routine service.
 Some delay should be anticipated when ordering these items.

SEMICONDUCTORS

In each case, u: $\mu$ , for example: uA..:  $\mu$ A.. uPA.:  $\mu$ PA.

uPB..: μPB.. uPC..: μPC.. uPD..: μPD..

CAPACITORS

uF: µF

• COILS re ult: µH in-

When indicating parts by reference number, please include the board.

The components identified by mark A or dotted line with mark. A are critical for safety.
Replace only with part number specified.

Abbreviations

G : German model IT : Italian model

EE : East European model AUS : Australian model EA : Saudi Arabia model

MY : Malaysia model SP : Singapore model

A57 : TA-A57 D509 : TA-D509

Ref. No.	Part No.	Description		Re	mark	Ref. No.	Part No.	Descrip	tion		Re	emark
*	1-647-206-11	DENGEN BOA	RD (A57)	_	_	C529	1-164-159 <b>-</b> 11	CERAMIC		0. 1uF		50V
		++++++++++	*****			C530	1-164-159-11	CERAMIC		0. 1uF		50V
						C531	1-126-163-11	ELECT		4. 7uF	20%	50V
		< CONNECTOR >						(A57)				
						C532	1-124-034-51			33uF	20%	16V
* CN3	1-573-565-11	PIN, CONNECTO	R 5P (A57)			C533	1-124-034-51			33uF	20%	167
		< SWITCH >				C534	1-162-219-31			68PF	5%	50V
A U01	1 579 002 11	CELECTOR WOL	መልወድ <i>(ዝን</i> ስ) መልወ	e orient	AUD)	C535	1_120_471_06	(A57)		0. 001uF	5%	50V
<b>∆</b> VS1	1-5/2-009-11	SELECTOR, VOL	TAGE (VULTAGE	e Serect	UK)	6939	1-130-471-00			u. uutur	9%	301
	****	(A57)				0555	1 100 000 01	(A57)		оалыг	100	EN
<b>李安华张孙孝子</b>	·资本班明书书书书书看管班等?	<b>医療安康安康安康安康安康安康</b>	市水市水市水市市 (市市)	******	*****	C555	1-162-286-31			220PF	10%	50V
	1 4888 888 1	ana naine aa	uni man (nego)				* 1-126-153-11			4. 7uF	20%	50V
*		GEQ BOARD, CO GEO BOARD, CO		)		6557	1-136-173-00	LILI		0. 47uF	5%	50V
		******	*****			C558	. 1-136-158-00	FILM		0. 027uF	5%	50V
						C559	1-136-177-00	FILM		1uF	5%	50V
		< CAPACITOR >				C560	1-136-163-00	FILM		0.068uF	5%	507
						C561	1~130-484-00	MYLAR		0.012uF	5%	507
C505	1-162-286-31	CERAMIC	220PF	10%	50V	C562	1-130-469-00			680PF	5%	50V
C506	1-126-163-11		4. 7uF	20%	50V		,					
C507	1-136-177-00		1uF	5%	50V	C563	1-130-479-00	MYLAR		0.0047uF	5%	50V
	1-136-163-00		0. 068uF	5%	50V		1-110-340-11			270PF	5%	500
C509	1-136-173-00		0. 47uF	5%	50V	C565	1-136-159-00	FILM		0.033uF	5%	500
						C566	- 1-130-474-00			0.0018uF	5%	507
C510	1-136-158-00	FILM	0. 027uF	5%	50V	C567	1-136-163-00			9. 968uF	5%	507
	1-130-479-00		0. 0047uF	5%	50V							
C512	1-110-340-11		270PF	5%	50V	C568	1-130-478-00	MYLAR		0.0039uF	5%	50Y
C513	1-130-484-00		0. 012uF	5%	50V	C569	1-136-168-00	FILM		0. 18uF	5%	50V
C514	1-130-469-00		680PF	5%	50V	C570	€ 1-136-153-00	FILM		0.01uF	5%	50V
	1 101 100 40						1-124-034-51			33uF	20%	167
C515	1-136-159-00	FILM	0. 033uF	5%	50V		1-126-163-11			4. 7uF	20%	50V
	1-130-474-00		0. 0018uF	5%	50V							
	1-136-163-00		0. 068uF	5%	50V	C578	J 1-136-169-00	FILM		0. 22uF	5%	50V
	1-130-478-00		0, 0039uP	. 5%	50V			(A57)		*******	4.4	
C519	1-136-168-00		0, 18uF	5%	50V	C579	1-164-159-11			0. 1uF		50V
***			******				1-164-159-11			0. 1uF		50V
C520	1-136-153-00	FILM	0.01uF	5%	507		,					
	1-124-034-51		33uF	20%	16V			< CONNE	TOR >			
C523	1-162-282-31		100PF	10%	507				-			
C524	1-162-282-31		100PF	10%	50V	CN102	1-691-185-11	CONNECT	OR (BOAR	D TO BOARD	) 15P	
	1-126-163-11		4. 7uF	20%	- 50V				,_ ,_			
								< DIODE	>			
C526	1-164-159-11	CERAMIC	0. 1uF		50V							
C527	1-124-034-51	ELECT	33uF	20%	16V	D501	8-719-000-54	DIODE	UZL-6L3			
C528	1-136-169-00	FILM	0. 22uF	5%	50V	D502 ·	8-719-987-63	DIODE	1N4148M	(A57)		
		(A57)										

## GEQ IC JACK

Ref. No.	Part No.	Description			Re	emark	Ref. No.	Part No.	Description			R	emark
		< IC >			_		*	1-647-211-11	JACK BOARD			_	
IC502	8-759-633-78 8-759-822-26 8-759-636-73	IC LC7522K	-22 (A57)						< CAPACITOR >				
	8-759-633-78		EC (1201)				C421	1-162-294-31	CERAMIC (A57)	0.001	ıF	10%	507
		< TRANSISTOR	>				C422	1-136-167-00		0. 15ul	ř	5%	50 <b>V</b>
Q504 Q510	8-729-224-62 8-729-900-63		2SK246-6 DTA124ES	. ,			C423	1-162-219-31		68PF		5%	50V
Q554	8-729-224-62	TRANS1STOR	2SK246-6	R (A	57)		C424	1-162-286-31		220PF		10%	507
		< RESISTOR >					C425	1-125-163-11		4. 7uF		20%	50V
R507	1-247-887-00	CARBON	220K	5%	1/4₩								
R508	1-249-427-11		6. 8K	-	1/4₩		C426	1-126-163-11		4. 7uF		20%	50V
R509	1-249-427-11	CARBON	8. 8K	5%	1/4₩				(A57)				
R510-5	1-247-903-00	CLDDOV	110	CO.	1 //50		C427	1-162-286-31		220PF		10%	50V
R517	1-249-408-11		1M 180	5% 5%	1/4\ 1/4\		C428	1-126-163-11	(A57) ELECT (A57)	4. 7uF		20%	50V
R518	1-249-417-11	CARBON	1K	5%	1/4W		C429	1~124~034-51		33uF		20%	16V
R519	1-249-417-11	CARBON	1K	5%	1/4W			• • • • •	(A57)	****			241
R520	1-249-435-11	CARBON	33K	5%	1/4W	(A57)	C430	1-124-034-51	ELECT	33uF		20%	16V
R525	1-249-429-11		10K	5%	1/4₩	(A57)			(A57)				
R529	1-249-429-11	CARBON	10K	5%	1/4W	(A57)							
	1-249-413-11	CARBON	470	5%	1/4₩	(A57)	C431	1-162-306-11	CERAMIC (A57)	0. 01uf		20%	16V
R531-5		CADDON	100	CW	4 7,400	(459)	-		/ compressor				
R534	1-249-429-11 1-249-427-11		10K 6.8K			(A57)			< CONNECTOR >				
R535	1-247-895-00		470K			(A57) (A57)	# CN401	1_569_996_11	SOCKET, CONNECT	י מד מוי	/AE71		
R536	1-249-441-11		100K			(A57)			PLUG (MICRO CON				
R557	1-247-887-00	CARBON	220K	5%	1/4W				< 10 >				
R558	1-249-427-11		6. 8K		1/4W				1 20 /				
R559	1-249-427-11		6.8K		1/4#		IC421	8-759-636-73	IC M5218AL-22	(A57)			
R560-5	66									, ,			
	1-247-903-00		P.M.	5%	1/4W				< JACK >				
R570	1-249-435-11	CARBON	33K	5%	1/49	(A57)							
		d - 4 h 4 h				4. ==>	1		JACK, PHONE (MI				
R575	1-249-429-11		10K	5%	1/4W	1 1	J702	1-507-854-00	JACK, PHONE (HEA	DPHONES	5)		
R584 R585	1-249-427-11 1-247-895-00		6. 8K		1/4₩				/ BEGIGMAD \				
	*************		470K			(A57)			< RESISTOR >				
********			Carrie de la carrie de la carrie de	diametric design	and and and b	****	R421	1-249-441-11	CAPRON	100K	F94	1 //W	(A57)
*	1-647-207-11	IC BOARD					R422	1-249-429-11			5%		(A57)
		****					R423	1-249-417-11			5%		(A57)
							R424	1-249-440-11			5%		(A57)
		< IC >					R425	1-249-429-11	CARBON	10K	5%		(A57)
_													
	8-749-922-91		050 (D509	)			R426	1-249-427-11	CARBON	6. 8K	5%	1/4W	(A57)
	8-749-922-95		190 (A57)				R427	1-249-440-11	CARBON		5%	1/4₩	(A57)
****	*****	******	*****	****	*****	*****	R428	1-249-409-11			5%		(A57)
							R429	1-249-429-11			5%		(A57)
							R430	1-249-405-11	CARBON	100	5%	1/4W	(A57)



Ref. No.	Part No.	Description		Re	emark	Ref. No.	Part No.	Description		Re	emark
B432	1-249-405-11	CARBON	100 5%	1/4₩	(A57)	C714	1-136-163-00	FILM	0. 068uF	80	50V
R725	1-247-749-11	CARBON	560 5%	1/2₩		C715	1-162-199-31	CERAMIC	10PF	5%	50V
R775	1-247-749-11	CARBON	560 5%	1/2₩		C716	1-162-291-31	CERAMIC (G, IT)	560PF	10%	50V
		< VARIABLE RESI	ISTOR >			C717	1-162-291-31	CERAMIC (G, IT)	560PF	10%	50V
RV421	1-223-334-11	RES, VAR, CARBO	N 50K (MIC	LEVEL)	(A57)	C719	1-164-159-11	CERAMIC	0. 1MF		50V
*****	*****	*****	*****	******	*****			(G, IT)			
st.	1-647-213-11					C721	1-161-494-00		0. 022uF		25V
		****				C722	1-164-159-11	(G, IT) CERAMIC	0. 1MF		50V
*******	******	*******	********	*****	*****	G723	1-164-159-11	(G, IT) CERAMIC	0. 1MF		50V
*	A-4360-064-A	MAIN BOARD, COM	APLETE (AEP,	EE)				(G, IT)			
*		MAIN BOARD, COM	1.1.	')		C724	1-161-377-00	CERAMIC (G, IT)	0. 0047uF	30%	16V
*		MAIN BOARD, COM		IS, EA)		0725	1-164-159-11		0. 1MF		50V
•	A-4360-068-A	MAIN BOARD, COM		P)				(G, IT)			
						0751	1-126-161-11	ELECT	2. 2uF	20%	50V
*	1-533-293-11	FUSE HOLDER				C752 *	1-162-282-31	CERAMIC	100PF	10%	50V
*	3-309-144-31	HEAT SINK				C753	/1-162-286-31	CERAMIC	220PF	10%	: 50V
*	4-941-237-01	HEAT SINK				C754	1-124-994-11	ELECT	100u₽	20%	10V
*	4-942-204-01	PLATE, GROUND				C758	1-136-163-00	FILM	0.068uF	5%	50V
	7-685-871-01	SCREW +BVTT 3X6	6 (S)			-					
						C759	1-136-163-00		0.068uF	5%	50V
		< CAPACITOR >				C763	1-136-163-00		0. 068uF	5%	50V
						1	1-136-163-00		0.068uF	5%	50V
<u></u> C1	1-161-744-00		0. 01uF	4.54	400V	C765	1-162-199-31		10PF	5%	50V
C301	1-162-293-31		820PF	10%	50V	G801 .	1-126-224-11		4700cF	20%	42V
	1-162-207-31		22PF	5%	50V			(D509)			
C351 C352	1-162-293-31 1-162-207-31		820PF 22PF	10% 5%	50V 50V	C801	1-126-258-11	EI SCT	4700uF	20%	567
								(A57)			
C401	1-162-286-31		220PF	10%	50V	C802	1-126-224-11		4700uF	20%	42V
	1-162-286-31		220PF	10%	, 50V	ana	1-126-258-11	(D509)	4700F	200	Fe17
	1-126-161-11		2. 2uF	20%	50Y 50Y	C802	1-126-258-11		4700uF	20%	, 56V
C702 C703	1-162-282-31		100PF 220PF	10% 10%	50Y	C803	1-124-910-11	(A57) FLECT	47uF	20%	507
							1-124-910-11		47uF	20%	50V
	1-124-994-11		100uF	20%	10V			DI D40	48.5	0.04	COTI
C706	1-124-122-11		100uF	20%	50V	C807	1-126-059-11		10uF	20%	50V
0700	1 104 570 11	(D509)	400 P	COW.	Cost		1-126-059-11		10uF	20%	50V
6706	1-124-572-11		100uF	20%	63V		1-124-994-11		100uF	20%	10V
C707	(1-124-122-11		100uF	20%	50Y		1-124-994-11 1-164-159-11	CERAMIC	100uF 0. 1MF	20%	10V 50V
6505	14 104 570 14	(D509)	400 5	0.04	0.057			(G, IT)			
6707	1-124-572-11		100uF	20%	63V	0010	1 1e1 not 11	OPDANTO	0.047P	4.00	0.537
		(A57)				C818 C819	1-161-021-11 1-161-021-11		0. 047սF 0. 047սF	10% 10%	25V 25V
6709	1-136-163-00	ETIM	0. 068uF	5%	50V		1-126-059-11		0. 047ur 10uF	20%	50V
C708	1-136-163-00		0. 068uF	5%	50V		1-126-696-11		33uF	20%	35V
	1-124-587-11		220uF	20%	6. 3V		1-126-050-11		10uF	20%	50V
C711	1-124-587-11		220uF	20%	6. 3V	7023	1 120 003 11	Darvi	LVul	200	301
C712	1-124-994-11		100uF	20%	10V	C830	1-124-910-11	ELECT	47uF	20%	50V
					1 -	0030	" - TP4 910 11	(UK)	4700	EUA)	. 007
C713	1-136-163-00	FILM	0. 06 <b>8</b> uF	5%	50V	I					

The components identified by mark A or dotted line with mark. A are critical for safety.
Replace only with part number specified.

### MAIN

Ref. No.	Part No.	Description		Re	emark	R	ef. No.	Part No.	Description	u.		Re	emark
C831	1-161-021-11	CERAMIC (UK)	0. <b>047</b> uF	10%	25V			8-759-000-48 8-759-000-48		 528CP 528CP (EXCE	וו דס	_ ი	
C832	1-161-021-11		0. 047uF	10%	257		IC702	8-759-111-68 8-759-071-48	IC uPC12	37HA	AI VI	1)	
C852	1-164-159-11		0. 1uF		50V			8-759-604-95					
C853	1-164-159-11		0. 1uF		50V		IC851	8-759-103-93	IC uPC39	3C (UK)			
C854	1-136-169-00		0. <b>22</b> uF	5%	50V				< JACK >				
<b>C85</b> 5	1-136-169-00		0. 22uF	5%	50V	*	J701 🖟	1-569-130-11		2P (SURROUN	ID SPE	EAKER)	
C856	1-126-059-11	(UK) ELECT (UK)	10uF	20%	50V		1 7 N T 1	1-420-872-00	COIL >	CODE			
		< CONNECTOR >					L751	1-420-872-00					
* CN1	1-564-321-00	PIN. CONNECTO							< TRANSIST	OR >			
		BASE POST 22M		2P (D	509)		Q250	8-729-900-80	TRANSISTOR	DTC114ES	}		
		BASE POST 22M					Q251	8-729-900-80	TRANSISTOR				
		SOCKET, CONNE		TEM CON	TROL 1)		Q252	8-729-620-05	TRANSISTOR	2SC2603-	EF		
* CN302	1-568-826-11	SOCKET, CONNE	CTOR 7P (A57)			1	Q301-3						
	4 800 004 44	nagerm gausm	amon 4 PD					8-729-900-63					
		SOCKET, CONNE					Q304 -	8-729-900-80	TRANSISTOR	DTC114ES			
		PIN, CONNECTOR				i	0004	0.700 440 04	MOMENT DISEASE	0000044	Part at		
		PIN, CONNECTOR				1	Q701	8-729-140-84				A	
		SOCKET, CONNECTO				1	0702	8-729-900-63					
* UNTUZ	1-204-200-11	PLUG, CONNECT	UK 3P				-	8-729-140-84				A	
CNTAT	1_001_707_11	DICIC ONTERN C	OUNDOTOD) ED				Q801	8-729-141-83				n	
		PLUG (MICRO CONNECTED CONN		TEM CON	ני זממדי		Q851	8-729-140-93	THANS151UN	2SB733-3	4 (Un	,	
		PIN, CONNECTOR							< RESISTOR				
		(UK)		N TO-LA	A#11.)				/ UE01010U				
		PLUG, CONNECT					R250-2						
• CN852	1-564-505-11	PLUG, CONNECT	OR 2P (UK)					1-249-413-11		470	5%	1/4W	
		( hyann )					R253	1-249-425-11		4. 7K		1/4W	
		< DIODE >					R254	1-249-429-11		108	5%	1/4₩	
D701-7	TOE						R255	1-249-429-11		10K	5%	1/4W	
D/01-	700 8-719-987-63	DIODE 1N414	OM .				R256	1-249-417-11		1K	5%	1/4W	
D802-8		NIONE IMATA	nii.						(EXCEPT UK	,			
	8-719-933-50	DIODE HZS7C	2L				R257	1-249-417-11	CARBON	1K	5%	1/4₩	
D813	8-719-987-63	DIODE 1N414	BM						(EXCEPT UK	)		·	
D814	8-719-987-63	DIODE 1N414	334				R258 -	1-249-413-11	-	470	5%	1/49	(A57)
D822	8-719-934-22	DIODE HZS30-	-2L				R301	1-247-897-11	CARBON	560K	5%	1/49	
							R302	1-249-437-11	CARBON	47K	5%	- 1/4W	
D823	8-719-014-74	DIODE UZP-6.	. 2B				R303	1-247-897-11	CARBON	560K	5%	1/49	
D830-8	332												
	8-719-200-82	DIODE 11ES2	(UK)				R304	1-249-429-11	CARBON	10K	5%	1/4₩	
D851	8-719-987-63	DIODE 1N4140	BM (UK)				R319	1-249-432-11	CARBON	18K	5%	1/4₩	
D852	8-719-987-63	DIODE 1N4148	BM (UK)				R320	1 - 249 - 435 - 11	CARBON	33K	5%	1/4₩	
							R327-33	29					
		< IC >						1-249-433-11	CARBON	22K	5%	1/4W	
							R351	1-247-897-11	CARBON	560K	5%	) 1/4W	
IC250	8-759-202-61	IC TC4094BP										_	
IC301	8-759-000-49	IC MC14066B0	CP				R352	1-249-437-11	CARBON	47K	5%	1/4%	
IC302	8-759-634-51	IC M5218AP					R353	1-247-897-11	CARBON	560K	5%	1/4₩	

Ref. No.	Part No.	Description			Re	mark	Ref. No.	Part No.
R354	1-249-429-11	CARBON	10K	5%	1/4₩		R757	1-249-41
R401	1-249-417-11	CARBON	1K	5%	1/4₩		R758	1-249-43
R402	1-249-417-11		1K	5%	1/4W		R759	1-249-44
R403	1-249-413-11		470	5%	1/4W		AR760	1-217-15
R404	1-249-405-11		100	=	1/4₩		R761	1-247-72
R405	1-249-425-11	CARBON	4. 7K	5%	1/ <b>4</b> ₩		R762	1-247-72
		(EXCEPT UK)					R763	1-249-43
R406	1-249-426-11	CARBON	5. 6K	5%	1/4W		R771	1-247-72
		(EXCEPT UK)						1-216-48
R407	1-249-421-11	CARBON (EXCEPT UK)	2. 2K	5%	1/4W		<u></u> \$\text{\$\text{\$\Lambda\$}\$}\$R802	1-216-48
R451	1-249-417-11	,	1K	5%	1/4%		R805	1-247-76
R452	1-249-417-11		1K	5%	1/4W		R806	1-249-42
					-, -,		R851	1-249-42
R453	1-249-413-11	CARBON	470	5%	1/4W		R852	1-249-44
R454	1-249-405-11		100	5%	1/49		R853	1-249-41
R455	1-249-425-11		4. 7K		1/49		1,000	2 010 11
11-200	2 240 420 11	(EXCEPT UK)	21 (1)	V.4	A./ 3411		R854	1-249-42
R456	1-249-426-11		5. 6K	5%	1/4₩		R855	1-249-43
11230	1 110 110 11	(EXCEPT UK)	0. 011	U/6	7/34		R856-8	
R457	1-249-421-11		2. 2K	5%	1/4₩		na50-0	1-2 <b>4</b> 9-41
D491	1-742-471-13	(EXCEPT UK)	2. £ħ	€#p	1/4/		R860	1-247-73
		(EAUERT ON)					R861	1-249-38
R461-4	63						1001	1-249-90
	1-249-417-11	CARBON	1K	5%	1/49			
R701	1-249-417-11	CARBON	1K	5%	1/4₩			
R702	1-249-438-11	CARBON	56K	5%	1/4W		RY701	1-515-76
R703	1-249-413-11	CARBON	470	5%	1/4W			
R704	1-249-438-11		56K	5%	1/4W			
<u>∧</u> R705	1-212-881-11	FUSIBLE	100	5%	. 1/4W	F	ı́AS1	1-554-92
<u></u> R706	1-212-881-11	FUSIBLE	100	5%	1/4W		_	
R707	1-249-417-11	CARBON	1K	5%	1/48			
R708	1-249-430-11		12K	5%	1/4W			
R709	1-249-441-11		100K		1/4W		TM701	1-537-24
				***	-,			******
<u>∧</u> R710	1-217-156-00		0. 22		5W			
R711	1-247-727-11		10	5%	1/2W		rêr .	A-4360-0
R712	1-247-727-11	CARBON	10	5%	1/2W		*	A-4360-0
R713	1-249-437-11		47K	5%	1/4W			
R714	1-249-429-11	CARBON	10K	5%	1/4W			4
B1 40 4		4.0044					*	4-921-94
R715	1-249-441-11		100%	5%	1/4W		**	4-923-10
R716	1-249-417-11		1K	5%	1/4W		**	4-957-10
R718	1-249-437-11	CARBON	47K	5%	1/4W			
R719	1-249-486-11	CARBON	12K	5%	1/2W			
<u>∧</u> R720	1-216-456-00	METAL OXIDE	820	5%	2₩	f		
		(D509)					C601	1-126-16
							C602	1-162-28
<u>∧</u> R720	1-216-457-00	METAL OXIDE	1. 2K	5%	2₩	F	C603	1-162-28
		(A57)					C604	1-126-16
R721	1-247-727-11	CARBON	10	5%	1/2W		C805	1-126-30
R751	1-249-417-11	CARBON	1K	5%	1/4W			
R752	1-249-438-11	CARBON	56K	5%	1/4W		C606	1-124-25
R753	1-249-413-11	CARBON	470	5%	1/4W		C607	1-126-30
					-		C608	1-126-05
							4000	T TEO De

Ref. No.	Part No.	Description			Rei	mark
R757	1-249-417-11	CARBON	1K	5%	1/4W	
R758	1-249-430-11		12K	5%	1/4W	
	1-249-441-11	CARBON	100K	5%	1/4W	
****	1-217-156-00		0, 22		5W	
R761	1-247-727-11		10	5%	1/2W	
74.01	1 21, 10, 11	011112 011		514	-,	
R762	1-247-727-11	CARBON	10	5%	1/2W	
R763	1-249-437-11		47K	5% .	1/4W	
R771	1-247-727-11	CARBON	10		1/2W	
<b></b> ₽801	1-216-481-11	METAL OXIDE	1. 2K	5% (	3W	F
<u></u> <b>№</b> R802	1-216-481-11	METAL OXIDE	1. 2K	5%	3W	F
DOOF	1 045 501 41	GADDON	E PV	Car.	r /ndi	
R805			5. 6K		1/2W	
	1-249-421-11		2. 2K	5%	1/4W	(1112)
R851	1-249-421-11	CARBON	2. 2K		1/4W	
	1-249-441-11		100K	5%	1/4₩	
R853	1-249-417-11	CARBON	1K	5%	1/4W	(UK)
R854	1-249-426-11	CARBON	5. 8K	5%	1/4W	(UK)
R855			56K		1/4#	
R856-8		GI BLOTT	0033	One .	1, 1,,	(014)
	1-249-417-11	CARBON	1K	5%	1/4W	(UK)
R860	1-247-730-11	CARBON	18	5%	1/2₩	(UK)
R861	1-249-389-11	CARBON	4.7	5%	1/4W	(UK)
		< RELAY >				
RY701	1-515-765-11	RELAY				
		< SWITCH >				
<u></u> \$1	1-554-920-51	SWITCH, PUSH (A	C POWE	R) (1 K	EY) (P	OWER)
		< TERMINAL >				
TM701	1-537-240-11	TERMINAL BOARD	СНЕСК	FR PIN	(SPF	ARFR)
		********				,
njr		PANEL BOARD, CO			)	
*	A-4360-076-A	PANEL BOARD, CO		(A57)		
		******	*****			
*	4-091-041-01	CUSHION (FL)				
*		HOLDER, FL TUBE				
*		HOLDER (5 GANG).				
	2 001 200 02	< CAPACITOR >	, 557			
		( 01111011011 )				
C601	1-126-161-11	ELECT	2. 2uF		20%	50V
C602	1-162-282-31	CERAMIC	100PF		10%	50V
C603	1-162-282-31	CERAMIC	100PF		10%	50V
C604	1-126-161-11	ELECT	2. 2uF	n.	20%	50V
C805	1-126-300-11	ELECT	0. 47u	F 📑	20%	50V
C606	1-124-250-00	FLECT	0. 15u	F	20%	50V
C607	1-124-230-00		1uF		20%	50V
C608	1-126-059-11		10uF		20%	50V
C609	1-126-059-11		10uF		20%	50V
0000	7 120 003 11	PREGI	LUM		208	001

The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

### PANEL

Ref. No.	Part No.	Description		Re	emark	Ref. No.	Part No.	Desci	ription		Remark
C611	1-164-159-11	CERAMIC	0. 1uF		50V	D922	8-719-301-39	LED	SEL2210S	(HALL/1)	
C612	1-164-159-11	CERAMIC	0. 1uF		507	D923	8-719-301-39		SEL2210S	(DANCE/2)	
C651	1-126-161-11	ELECT	2. 2uF	20%	50V	D924	8-719-301-39		SEL2210S		
C652	1-162-282-31	CERAMIC	100PF	10%	507	D925	8-719-301-39		SEL2210S	(WM/4)	
C653	1-162-282-31	CERAMIC	100PF	10%	50V	D926	8-719-301-39		SEL2210S		
C654	1-126-161-11	ELECT	2. 2uF	20%	j 50V	D930-9	336				
C655	1-126-300-11	ELECT	0. 47uF	20%	507		8-719-987-63	DIODI	1N4148M		
C656	1-124-250-00		0. 15uF	20%	· 50V	D938	8-719-987-63				
C657	1-126-301-11		1uF	D.770	, 50V	D939	8-719-313-69		SEL3210S-		
C902		DOUBLE LAYERS	0. 22F	*****	5. 5V	D940	8-719-313-69			CD (TUNER)	
-+4-	v	F-V-0-00 DI32510	V1 221		3, 0,	D941	8-719-313-69		SEL3210S-	4	
C905	1-161-379-00	CERAMIC	0. 01uF	20%	25V		0 /10 010 05	BED	OLLO2100	00 (00)	
	1-164-159-11		0. 1uF	200	50V	D942	8-719-313-69	1.FD	QRI 32109	CD (MEMORY)	
C311	1-164-159-11		0. 1uF		50V	D943	8-719-313-69			CD (PERSONAL	EII C)
C912	1-164-159-11		0. 1uF		50V	D943 D944	8-719-313-69		SEL32105-	-	FILE)
	1-162-294-31		0. 10r 0. 001uF	1.00	50V	D944 D945	8-719-313-69			CD (SELECT 5	)
0321	1-107-794-91	CENAILO	n. notae	10%	301						-
0000	1 504 150 11	CEDANIC	0.4		EAU.	D946	8-719-313-69	LED	2013Z102-	CD (EQUALIZE	K)
	1-164-159-11		0. 1uF		507	2042	0 740 040 00	1.05	001 004 00	an /strnnal	
	1-164-159-11	CERAMIC	0. 1uF		50V		8-719-313-69	LED	SEL32105-0	CD (VIDEO)	
C941-9		appaula.	ARODD	400	E011	Ð948-9		DIAN	41144461		
C948-9	1-162-290-31 50	CERAMIC	470PF	10%	50V		8-719-987-63	DIODE	1N4148M		
	1-162-290-31	CERAMIC	470PF	10%	50V			< FLU	JORESCENT II	NDICATOR >	
C961	1-162-291-31	CERAMIC	560PF	10%	507	FI 004	1 515 151 14	YMD 17	AMON MINE	ne Hongoone	
		< VIBRATOR >				kra01	1-517-151-11	< IC		PLUUKESUENI	
CF901	1-577-101-11	VIBRATOR, CERAN	ATC (4. 19MH:	z)				< 10	/		
							8-759-634-50		M5218AL		
		< COMPOSITION (	CIRCUIT BLO	CK >			8-759-164-69 8-759-991-11		uPD78042GF- XR1091DCP	-018-3 <b>B</b> 9	
CP901	1-236-985-11	COMPOSITION CIT	RCUIT BŁOCK	(100kX9	1)						
CP902-	904							< TRA	NSISTOR >		
	1-232-998-11	COMPOSITION C18	RCUIT BLOCK	(100kX7	)						
					.	Q601	8-729-224-62	TRANS	SISTOR 2SI	K246-GR	
		< D10DE >				Q602	8-729-620-05	TRANS	SISTOR 2S	C2603-EF	
						Q603	8-729-900-36	TRANS	SISTOR DT	C124ES	
D601	8-719-987-63	DIODE 1N4148N	1		[	Q604	8-729-900-61	TRANS	SISTOR DTA	A114ES	
D602	8-719-026-72		STOREM ON YOU	CID)		Q651	8-729-224-62	TRANS	SISTOR 2S	K246-GR	
กรกจ	R=710_028_79	(DYNAMIC BASS S LED SML1860A	NOTEM UN/UI	(E)		OCE?	0_790_C20_OF	TDANG	TOTAL AN	10000_FF	
P003	0-119-020-12		STOREM AN AS	PE\			8-729-620-05			C2603-EF	
DOE1	0 740 007 00	(DYNAMIC BASS S		(P)			8-729-900-80			C114ES	
D651							8-729-900-80			C114ES	
V084 '	8-719-987-63	DIODE 1N4148W	1		-	Q913 Q916-9		TRANS	SISTOR DI	C114ES (A57)	
D907	8-719-987-63	DIODE 1N4148N	1			•	8-729-900-80	TRANS	SISTOR DT	0114ES	
D911	8-719-313-69		CD (P. FUNCT	rion)							
D912		LED SEL3210S-				Q924-9	126				
D913	8-719-313-69		CD (KARAOKE		A57)	4021 0	8-729-620-05	TRANS	HSTOR 2SC	12603-FF	
D916	8-719-313-69				,	Q931-9		2462116		72000 LI	
2010	0 110 010 00	DED DEDODIOD	OD (011)			6301 3	8-729-900-80	TRANS	TO SOTE	2114ES	
D917	8-719-313-69	1 FD SEL 3210S-	CD (HIGH)			0049	8-729-141-26				
	8-719-313-69					75.6h	0 123 141_20	THEFT	101011 200	AATTU.TU	
4	8-719-313-69		, ,					/ DEC	ICTOD \		
	8-719-313-69		CD (SIMULA)	LED)				/ NES	SISTOR >		
	74 FIR DIO 02	PPD DEPOYING	AN ANTHURY	(UV)	į.						
D920 D921	8-719-313-69		CD (HALL)		-	R601	1-249-441-11	CADDO	nu	100K 5%	1/4₩

## PANEL PIN JACK

B803   1-247-903-90   CARBON   1.8   5%   1.49	ef. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Re	mark
ENDS   1-249-434-11 CARBON   27K   5K   1/4W   SOUL   1-554-303-21 SHITCH, TACTILE (DISPAN)   CHESON   CONTROL A   CHESON   CONTROL A   CHESON	R603	1-247-903-00	CARBON	100	5%	1/4W			< SWITCH >	_		
REGO   1-247-881-00 CARBON   1206   5%   1/49   1-549-412-11 CARBON   300   5%   1/49   1-549-412-11 CARBON   6.0 KS   1/49   1-549-411-1 CARBON   6	R604	1-249-420-11	CARBON	1. 8K	5%	1/4₩	1					
1-247-81-10 CARBON	R605 -	1-249-434-11	CARBON -	27K	5%	1/4W	S901	1-554-303-21	SWITCH, TACT	TILE (DISPLAY)		
				120K	5%	1/4W	S902	1-554-303-21	SWITCH, TACT	TILE (CURSOR CO	NTROL A	<b>A</b> )
R608   1-249-427-11   CARBON   6. 8K   5%   1/4#   S905   1-554-303-21   SHITCH, TACTILE (SURROUND MODE)							S903	1-554-303-21	SWITCH, TACT	TILE (MEMORY)		
1-249-427-11 CABRON	2000+	1 210 110 11	Olato Oli	000	0.0	- F - 17					LEVEL	
R511   -249-441-11 CABRON   580   5%   1/4W	репо	1949_497_11	CADBON	6 01	E94	1 //19						
Solid   1-249-441-11   CABRON   100K   5K   1/4W   Solid   1-249-435-11   CABRON   33K   5K   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R624   1-249-425-11   CABRON   4.7K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R655   1-249-441-11   CABRON   100K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R655   1-249-429-11   CABRON   100K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R655   1-249-903-00   CABRON   100K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R656   1-249-420-11   CABRON   120K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R656   1-249-420-11   CABRON   120K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R657   1-249-412-11   CABRON   120K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R658   1-249-430-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-430-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-430-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-430-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-431-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-431-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-431-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-431-11   CABRON   22K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R681   1-249-431-11   CABRON   32K   5X   1/4W   Solid   1-554-303-21   SWITCH, TACTILE (CHESOR CONTROL   R682   1-249-311-11   CABRON   32K   1/4W   Solid   1-249-431-11   CABRON   32K   1/4W   Solid   1-249-431-11   CABRON   32K   1/4W   Solid   1-249-431-11   CABRON   32K   1/4W   Soli							1303	1 334 303 21	QW(1014 1120	LIEL (BOINICORD	move,	
1-249-425-11 CARBON							2002	-1-554-202-21	SWITCH TAC	THE		
Fig. 14						•	3300	1,1-009-000 21			g)	
Section   Sec						-	9007	1_554_202_21	•			(7)
RB22	K014	1-249-425-11	CARBON	4. /K	3%	1/411						
RES_1   -249-441-11 CARBON   100K   SK   1/4W   S912   1-554-303-21 SWITCH, TACTILE (PERSONAL FILE)	D040	4 040 4PF 44	0.00001	4 777	Ear.	e Jani						
1652   1-249-429-11 CARBON												7/
RES   1-249-993-00   CABRON   1M   5%   1/4W   S915   1-554-303-21 SMITCH, TACTILE (EQUALIZED)							8911	1-554-303-21	SWITCH, TAG	TITE (ACKRONAL	rill)	
R654   1-249-420-11   CARBON										**** (OC! COM E)		
Signate   Sign												
R655	R654	1-249-420-11	CARBON	1. 8K	5%	1/4W					)	
R656 1-247-881-00 CARBON 120K 5% 1/4W 5917 1-554-303-21 SWITCH, TACTILE (PHONO)  R657 1-249-412-11 CABON 390 5% 1/4W 5918 1-554-303-21 SWITCH, TACTILE (CURSOR CONTROL ▼  R668 1-249-427-11 CARBON 6.6K 5% 1/4W 5918 1-554-303-21 SWITCH, TACTILE (CURSOR CONTROL ▼  R669 1-249-416-11 CARBON 820 5% 1/4W 5918 1-554-303-21 SWITCH, TACTILE (CURSOR CONTROL ▼  R911 1-249-416-11 CARBON 820 5% 1/4W 5921 1-554-303-21 SWITCH, TACTILE (CURSOR CONTROL ▼  R912 1-249-416-11 CARBON 820 5% 1/4W 5922 1-554-303-21 SWITCH, TACTILE (VIDEO)  R913 1-249-416-11 CARBON 820 5% 1/4W (AS7)  R916 922  1-249-411-11 CARBON 330 5% 1/4W (AS7)  R923-925  1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923-925  1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923 1-249-411-11 CARBON 18 5% 1/6W (AS7)  R923 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R923 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R924 1-249-995-11 CARBON 18 5% 1/6W (AS7)  R935 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R935 1-249-411-11 CARBON 100K 5% 1/4W (AS7)  R936 1-249-417-11 CARBON 100K 5% 1/4W (AS7)  R937 1-249-417-11 CARBON 100K 5% 1/4W (AS7)  R938 1-249-417-11 CARBON 100K 5% 1/4W (AS7)  R936 1-249-417-11 CARBON 100K 100K (ASS SYSTEM EXECUPECY (Hz))  R937 1-249-417-11 CARBON 100K 100K (ABASS SYSTEM EXECUPECY (Hz))  R940 1-249-395-11 CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  R950 1-249-397-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  R950 1-249-395-11 CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  R950 1-249-395-11 CERMIC 200F 10% (ABASS SYSTEM EXECUPECY (Hz))  R950 1-249-						- 444						
R657	R655	1-249-434-11	CARBON			,						
R688	R656	1-247-881-00	CARBON	120K		1/4W	S917	1-554-303-21	SWITCH, TAC	TILE (PHONO)		
Regin   1-249-433-11   CARBON   22K   5%   1/4W   S919   1-554-303-21   SWITCH, TACTILE (TUMER)   S921   1-554-303-21   SWITCH, TACTILE (CD)   S921   1-554-303-21   SWITCH, TACTILE (VIDEO)   S921   1-249-411-11   CARBON   300   5%   1/4W   S922   1-554-303-21   SWITCH, TACTILE (VIDEO)   S923   1-249-411-11   CARBON   100K   5%   1/4W   S922   1-249-411-11   CARBON   100K   5%   1/4W   S923   1-249-411-11   CARBON   100K   5%	R657 :	1-249-412-11	CARBON			1/4W	]					
R311	R658	1-249-427-11	CARBON	6. 8K	5%	1/4W	S918				NTROL '	₹)
R911	R681	1-249-433-11	CARBON	22K	5%	1/4W	S919					
R912							S920	1-554-303-21	SWITCH, TAC	THE (CD)		
R913   1-249-411-11   CARBON   330   5%   1/4W   A57    A249-411-11   CARBON   330   5%   1/4W   A4360-082-A PIN JACK BOARD, COMPLETE (D509)   A4360-083-A PIN	R911	1-249-416-11	CARBON	820	5%	1/4W	\$921	1-554-303-21	SWITCH, TAC	TILE (TAPE)		
R916-922	R912	1-249-416-11	CARBON	820	5%	1/4W	S922	1-554-303-21	SWITCH, TAC	TILE (VIDEO)		
R916-922	R913	1-249-416-11	CARBON	820	5%	1/4W (A57)						
1-249-411-11   CARBON   30   5%   1/4W   ***********************************							S923	1-554-303-21	SWITCH, TAC	TILE (P. FUNCTIO	N)	
* A-4360-082-A PIN JACK BOARD, COMPLETE (D509) * A-4360-082-A PIN JACK BOARD, COMPLETE (A57) ************************************		1-249-411-11	CARBON	330	5%	1/4₩						****
R927   1-249-441-11   CARBON   100K   5%   1/4W	R923-9	125										
**************************************			CARBON	100K	5%	1/4₩	*	A-4360-082-A	PIN JACK BOA	ARD, COMPLETE (	D509)	
R927							*	A-4360-083-A	PIN JACK BO	ARD, COMPLETE (	A57)	
R928	R927	1-249-441-11	CABRON	100K	5%	1/4W						
R829   1-249-441-11   CARBON   100K   5%   1/4W						*	-					
R931 1-249-441-11 CARBON 10									< CAPACITOR	>		
R932 1-249-396-11 CARBON 18 5% 1/6W C101 1-162-288-31 CERAMIC 330PF 10% C102 1-126-161-11 ELECT 2.2uF 20% C103 1-162-288-31 CERAMIC 100PF 10% 1-249-411-11 CARBON 330 5% 1/4W C104 1-162-219-31 CERAMIC 68PF 5% R953 1-249-405-11 CARBON 100 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R953 1-249-417-11 CARBON 1K 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R956-959 C107 1-130-473-00 MYLAR 0.0015uF 5% C107 1-130-473-00 MYLAR 0.0015uF 5% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 22uF 20% C109 1-124-034-51 ELECT 22uF 20% C109 1-124-034-51 ELECT 22uF 20% C109 1-124-033-51 ELECT 22uF 20% C113 1-126-233-11 ELECT 22uF 20% C												
R935-938  R951 1-249-411-11 CARBON 330 5% 1/4W C104 1-162-219-31 CERAMIC 100PF 10% R953 1-249-419-11 CARBON 100 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R953 1-249-419-11 CARBON 1, 5% 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R954 1-249-396-11 CARBON 1, 5% 1/4W C106 1-130-480-00 MYLAR 0, 0055uF 5% R956-959 C107 1-130-473-00 MYLAR 0, 0015uF 5% R963 1-249-396-11 CARBON 18 5% 1/6W C108 1-124-464-11 ELECT 0, 22uF 20% R963 1-249-437-11 CARBON 47K 5% 1/4W C110 1-162-286-31 CERAMIC 220PF 10% R964 1-249-417-11 CARBON 1, 5% 1/4W C110 1-162-286-31 CERAMIC 220PF 10% R964 1-249-417-11 CARBON 1, 5% 1/4W C110 1-162-286-31 CERAMIC 220PF 10% R965 1-238-977-11 RES, VAR, CARBON 100K/100K CDYNAMIC BASS SYSTEM LEVEL) RV601 1-238-977-11 RES, VAR, CARBON 100K/100K CDYNAMIC BASS SYSTEM LEVEL) RV602 1-238-977-11 RES, VAR, CARBON 100K/100K CDYNAMIC BASS SYSTEM FREQUENCY (Hz)) RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C152 1-126-161-11 ELECT 2.2uF 20% C155 1-126-161-11 ELECT 2.2uF 20% C150 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2.2uF 20%							C101	1-162-288-31	CERAMIC	330PF	10%	509
R935-938  1-249-411-11 CARBON 330 5% 1/4W C104 1-162-219-31 CERAMIC 68PF 5% R951 1-249-405-11 CARBON 100 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R953 1-249-419-11 CARBON 1.5K 5% 1/4W C105 1-124-910-11 ELECT 47uF 20% R954 1-249-417-11 CARBON 1.K 5% 1/4W C106 1-130-480-00 MYLAR 0.0015uF 5% R956-959 C107 1-130-473-00 MYLAR 0.0015uF 5% C107 1-130-473-00 MYLAR 0.0015uF 5% C109 1-124-034-51 ELECT 0.22uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 32uF 20% C109 1-124-034-51 ELECT 220FF 10% C112 1-162-286-31 CERAMIC 220PF 10% C113 1-126-233-11 ELECT 22uF 20% C120 1-164-159-11 CERAMIC 220PF 10% C114 1-126-236-31 CERAMIC 220PF 10% C115 1-162-286-31 CERAMIC 220PF 10% C120 1-164-159-11 CERAMIC 33uF 20% C150 1-244-385-11 RES, VAR, CARBON 100K/100K C119 1-162-286-31 CERAMIC 33uF 20% C150 1-126-161-11 ELECT 33uF 20% C150 1-126-161-11 ELECT 33uF 20% C150 1-126-161-11 ELECT 2.2uF 20% C150	N33Z	1-249-380-11	OBRIDON	10	(JA)	17 011						501
1-249-411-1,   CARBON   330   5%   1/4W   C104   1-162-219-31   CERAMIC   68PF   5%   68PF   1-249-405-11   CARBON   100   5%   1/4W   C105   1-124-910-11   ELECT   47uF   20%	מממב מ	120					1					501
R951 1-249-405-11 CARBON 100 5% 1/4W R953 1-249-419-11 CARBON 1.5K 5% 1/4W R954 1-249-417-11 CARBON 1K 5% 1/4W R956-959 1-249-396-11 CARBON 1B 5% 1/6W C106 1-130-480-00 MYLAR 0.0015uF 5% C107 1-130-473-00 MYLAR 0.0015uF 5% C108 1-124-464-11 ELECT 0.22uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 22uF 20% C109 1-124-034-51 ELECT 32uF 20% C110 1-162-286-31 CERAMIC 220PF 10% C111 1-126-233-11 ELECT 22uF 20% C112 1-162-286-31 CERAMIC 220PF 10% C113 1-126-233-11 ELECT 22uF 20% C113 1-126-233-11 ELECT 22uF 20% C114 1-126-233-11 ELECT 22uF 20% C115 1-162-286-31 CERAMIC 220PF 10% C116 1-126-233-11 ELECT 22uF 20% C117 1-126-233-11 ELECT 22uF 20% C118 1-126-233-11 ELECT 22uF 20% C119 1-162-286-31 CERAMIC 220PF 10% C120 1-164-159-11 CERAMIC 0.1uF  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K C121 1-124-034-51 ELECT 33uF 20% C152 1-126-161-11 ELECT 2.2uF 20%	<b>4939</b> -8		CARRON	220	Eer	1 /40/						501
R953 1-249-419-11 CARBON 1. 5K 5% 1/4W  R954 1-249-417-11 CARBON 1K 5% 1/4W  R956-959  1-249-396-11 CARBON 18 5% 1/6W  C107 1-130-473-00 MYLAR 0. 0015uF 5%  C107 1-130-473-00 MYLAR 0. 0015uF 5%  C108 1-124-464-11 ELECT 0. 22uF 20%  C109 1-124-034-51 ELECT 33uF 20%  R963 1-249-437-11 CARBON 47K 5% 1/4W  C110 1-162-286-31 CERAMIC 220PF 10%  R964 1-249-417-11 CARBON 1K 5% 1/4W  C111 1-126-233-11 ELECT 22uF 20%  C112 1-162-286-31 CERAMIC 220PF 10%  C113 1-126-233-11 ELECT 22uF 20%  C114 1-126-233-11 ELECT 22uF 20%  C115 1-162-286-31 CERAMIC 220PF 10%  C117 1-126-233-11 ELECT 22uF 20%  C118 1-126-233-11 ELECT 22uF 20%  C119 1-162-286-31 CERAMIC 220PF 10%  C119 1-162-286-31 CERAMIC 30PF 10%  C120 1-164-159-11 CERAMIC 0. 1uF  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K  (DYNAMIC BASS SYSTEM FEQUENCY (Hz))  C121 1-124-034-51 ELECT 33uF 20%  C125 1-126-161-11 ELECT 2. 2uF 20%	nore.					•	1					501
R954 1-249-417-11 CARBON 1K 5% 1/4W C106 1-130-480-00 MYLAR 0.0056uF 5% R956-959 C107 1-130-473-00 MYLAR 0.0015uF 5% C107 1-130-473-00 MYLAR 0.0015uF 5% C107 1-130-473-00 MYLAR 0.0015uF 5% C108 1-124-464-11 ELECT 0.22uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 32uF 20% C109 1-162-286-31 CERAMIC 220PF 10% C110 1-162-286-31 CERAMIC 220PF 10% C111 1-126-233-11 ELECT 22uF 20% C112 1-162-286-31 CERAMIC 220PF 10% C113 1-126-233-11 ELECT 22uF 20% C113 1-162-286-31 CERAMIC 220PF 10% C113 1-162-286-31 CERAMIC 220PF 10% C113 1-164-159-11 CERAMIC 0.1uF C120 1-164-159-11 CERAMIC 0.1uF C						*.	(102	7-774-810-11	ELEVI	4/01	20%	30
R956-959								² 4 man 400 00	MILLER	D DOTE. T	E4	E03
1-249-396-11 CARBON 18 5% 1/6W C108 1-124-464-11 ELECT 0.22uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 33uF 20% C109 1-124-034-51 ELECT 32uF 20% C109 1-162-286-31 CERAMIC 220PF 10% C110 1-162-286-31 CERAMIC 220PF 10% C111 1-126-233-11 ELECT 22uF 20% C112 1-162-286-31 CERAMIC 220PF 10% C113 1-126-233-11 ELECT 22uF 20% C113 1-162-286-31 CERAMIC 220PF 10% C120 1-164-159-11 CERAMIC 0.1uF C120 1-164-159-11 CERA			CARBON	1K	5%	1/4W						501
R963 1-249-437-11 CARBON 47K 5% 1/4W C110 1-162-286-31 CERAMIC 220PF 10% R964 1-249-417-11 CARBON 1K 5% 1/4W  C111 1-126-233-11 ELECT 22uF 20%  C112 1-162-286-31 CERAMIC 220PF 10%  C113 1-126-233-11 ELECT 22uF 20% C113 1-126-233-11 ELECT 22uF 20% C113 1-126-233-11 ELECT 22uF 20% C114 1-162-286-31 CERAMIC 220PF 10% C115 1-162-286-31 CERAMIC 220PF 10% C116 1-162-286-31 CERAMIC 220PF 10% C117 1-162-286-31 CERAMIC 220PF 10% C118 1-162-286-31 CERAMIC 220PF 10% C119 1-162-286-31 CERAMIC 220PF 10% C119 1-162-286-31 CERAMIC 220PF 10% C120 1-164-159-11 CERAMIC 0.1uF  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% C152 1-126-161-11 ELECT 2.2uF 20%	R956-9					- 44-9	1					501
R963 1-249-437-11 CARBON 47K 5% 1/4W  R964 1-249-417-11 CARBON 1K 5% 1/4W  C110 1-162-286-31 CERAMIC 220PF 10%  C111 1-126-233-11 ELECT 22uF 20%  C112 1-162-286-31 CERAMIC 220PF 10%  C113 1-126-233-11 ELECT 22uF 20%  C113 1-126-233-11 ELECT 22uF 20%  C113 1-126-233-11 ELECT 22uF 20%  RV601 1-238-977-11 RES, VAR, CARBON 100K/100K C119 1-162-286-31 CERAMIC 220PF 10%  CVARIABLE RESISTOR > C112 1-162-286-31 CERAMIC 220PF 10%  C13 1-126-233-11 ELECT 22uF 20%  C14 1-162-286-31 CERAMIC 220PF 10%  C15 1-164-159-11 CERAMIC 0.1uF  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE)  C15 1-162-288-31 CERAMIC 330PF 10%  C15 1-126-161-11 ELECT 2.2uF 20%		1-249-396-11	CARBON	18	5%	1/6W						501
R964 1-249-417-11 CARBON 1K 5% 1/4W  C111 [1-126-233-11 ELECT 22uF 20% C112 1-162-286-31 CERAMIC 220PF 10% C113 1-126-233-11 ELECT 22uF 20% C119 1-162-286-31 CERAMIC 220PF 10% C120 1-164-159-11 CERAMIC 0. 1uF  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% C152 1-126-161-11 ELECT 2. 2uF 20%								f				161
C111	R963	1-249-437-11	CARBON	47K	5%	-	C110	1-162-286-31	CERAMIC	220PF	10%	501
C112   1-162-286-31 CERAMIC   220PF   10%   1-238-977-11   RES. VAR. CARBON 100K/100K   C113   1-126-233-11   ELECT   22uF   20%	R964	1-249-417-11	CARBON	1K	5%	1/4W						
RV601 1-238-977-11 RES, VAR, CARBON 100K/100K C119 1-162-238-31 CERAMIC 220PF 10% (DYNAMIC BASS SYSTEM LEVEL) C120 1-164-159-11 CERAMIC 0. 1uF RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C151 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2. 2uF 20%												501
RV601 1-238-977-11 RES, VAR, CARBON 100K/100K C119 1-162-286-31 CERAMIC 220PF 10% (DYNAMIC BASS SYSTEM LEVEL) C120 1-164-159-11 CERAMIC 0. 1uF RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C151 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2. 2uF 20%			< VARIABLE RE	SISTOR >	>		C112	1-162-286-31	CERAMIC	220PF	10%	501
(DYNAMIC BASS SYSTEM LEVEL)  RV602 1-238-977-11 RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE)  C120 1-164-159-11 CERAMIC  C120 1-164-159-11 CERAMIC  C121 1-124-034-51 ELECT  C130 1-164-159-11 CERAMIC  C121 1-124-034-51 ELECT  C130 1-164-159-11 CERAMIC  C121 1-124-034-51 ELECT  C130 1-164-159-11 CERAMIC  C120 1-164-159-11 CERAMIC  C121 1-124-034-51 ELECT  C130 1-164-159-11 CERAMIC  C120 1-164-159-11 CERAMIC							C113				20%	507
RV602 1-238-977-11 RES, VAR, CARBON 100K/100K  (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE)  (DYNAMIC BASS SYSTEM FREQUENCY (Hz))  (C121 1-124-034-51 ELECT 33uF 20%  (C151 1-162-288-31 CERAMIC 330PF 10%  (C152 1-126-161-11 ELECT 2. 2uF 20%	RV601	1-238-977-11	RES. VAR. CAR	BON 100F	(/100F	(					10%	501
(DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C151 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2.2uF 20%			(DYNAMIC BASS	SYSTEM	LEVEL	.)	G120	1-164-159-11	CERAMIC	0. 1uF		507
(DYNAMIC BASS SYSTEM FREQUENCY (Hz)) C121 1-124-034-51 ELECT 33uF 20% RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C151 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2.2uF 20%	RV602	1-238-977-11	RES, VAR, CAR	BON 1001	(/100F	(						
RV604 1-241-385-11 RES, VAR, CARBON 100K (BALANCE) C151 1-162-288-31 CERAMIC 330PF 10% C152 1-126-161-11 ELECT 2. 2uF 20%		<b></b>					C121	1-124-034-51	ELECT	33uF	20%	161
C152 1-126-161-11 ELECT 2. 2uF 20%	RV604	1-241-385-11										501
	-21.48.6	***			42944		1					501
C153 1-162-282-31 CERAMIC 100PF 10%												501

## PIN JACK PS

C154	No. P	Part No.	Description		Re	emark	Ref. No.	Part No.	Description		F	emark
C155		  -162-219-31	CERAMIC	68PF	5%	50V	R156	1-247-897-11	CARBON	560K 5%	1/4%	1
C158	155 1	1-124-910-11	ELECT	47uF	20%	50V	R157	1-249-437-11	CARBON		1/4₩	
C158   1-124-664-11   ELECT	156 1	E-130-480-00	MYLAR	0.0056uF	5%	50V	R158	1-249-417-11	CARBON	1K 5%	1/4%	1
C159	157 1	1-130-473-00	MYLAR	0.0015uF	5%	50V						
C161		1-124-464-11	ELECT									
Cife   1-126-233-11   ELECT   22uF   20%   50V   R165   1-247-903-00   CARBON   18   5%   5%   50V   R165   1-247-903-00   CARBON   10   5%   50V   R165   1-247-903-10   CARBON   10   5%   50V   R167	159 1	-124-034-51	ELECT	33uF	20%	16V	R162	1-249-423-11	CARBON	3. 3K 5%	1/4%	
C163 1-126-286-31 CERAMIC 220F 10% 50V R165 1-247-903-00 CABBON 1M 5% C169 1-162-286-31 CERAMIC 220F 10% 50V R170 1-249-405-11 CABBON 100 5% C170 1-164-159-11 CERAMIC 0.1uF 50V C170 1-164-159-11 CERAMIC 0.1uF 50V C171 1-124-034-51 ELECT 33uF 20% 16V C171 1-124-034-51 ELECT 33u0-F 20% 16V C171 1-101-006-00 CERAMIC 0.047uF 20% 20% 1-124-887-00 ELECT 33u0-F 20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	160 1	-162-286-31	CERAMIC	220PF	10%	50V	R163	1-249-429-11	CARBON	10K 5%	1/4%	t
C163 1-126-288-31 CERAMIC 220F 10% 50V R150 1-249-405-11 CABBON 100 5% C163 1-126-233-11 ELECT 22uF 10% 50V R170 1-249-405-11 CABBON 100 5% C170 1-164-155-11 CERAMIC 220F 10% 50V C170 1-164-155-11 CERAMIC 0.1uF 50V C171 1-124-034-51 ELECT 33uF 20% 18V C4PACITOR >  CM101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P C805 1-124-887-00 ELECT 3300uF C310 1-124-887-00 ELECT 330uF C310 1-124-91-11 CABBON 100 S% 1/4W D310 1-249-447-11 CABBON 100 S% 1/4W D311 8-719-302-38 D100E BBV-602-01 D310 114148W D312 8-719-302-75 D100E 10E2N R113 1-249-447-11 CABBON 100 S% 1/4W D311 8-719-302-75 D100E 10E2N R113 1-249-447-11 CABBON 100 S% 1/4W D311 8-719-302-75 D100E 10E2N R113 1-249-447-11 CABBON 100 S% 1/4W D311 8-719-302-38 D100E BBV-602-01 D311 8-1249-447-11 CABBON 100 S% 1/4W D311 8-719-302-38 D100E BBV-602-01 D311 8-1249-447-11 CABBON 100 S% 1/4W D311 8-719-302-38 D100E BBV-602-01 D311 8-1249-447-11 CABBON 100 S% 1/4W A1CP801 1-532-843-21 LINK, IC (PR2500) (2. 5A) A1CP801 1-249-447-11 CABBON 100 S% 1/4W A1CP801 1-532-843-21 LINK, IC (PR2500)	L61 1	L-126-233-11	ELECT	22uF	20%	50V	R164	1-249-417-11	CARBON	1K 5%	1/49	t
Cl63	162 1	L-162-286-31	CERAMIC	220PF	10%	P.	R165	1-247-903-00	CARBON		-	
C189	163 1	L-126-233-11	ELECT	22uF	20%	50V				100 5%	1/4%	ſ
CHIO1 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P  CM101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P  CM101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P  CM101 8-759-636-73 IC M5218AL-22  IC102 8-759-000-48 IC MC14052BCP  CM102 8-759-000-48 IC MC14052BCP  CM103 1-101-006-00 CERAMIC  CM31 1-101-006-00 CERAMIC  CM37)  CM31 1-101-006-00 CERAMIC  CM37)  CM31 1-101-006-00 CERAMIC  CM37)  CM32 1-101-006-00 CERAMIC  CM37)  CM31 1-161-021-11 CERAMIC  CM37)  CM31 1-161-021-11 CERAMIC  CM37)  CM31 1-161-021-11 CERAMIC  CM37)  CM31 1-161-021-11 CERAMIC  CM34 1-161-021-11 CERAMIC  CM37)	L69 1	L-162-286-31	CERAMIC	220PF	10%	50V	******	******	********	*****	******	*****
* CN101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P  * CN101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P  CROSS 1-124-887-00 ELECT 3300uF  CROSS 1-124-887-00 ELECT 330uF  CROSS 1-124-887-00 CROSS 10 UF  CROSS 1-	L70 1	L-164-159-11	CERAMIC	0. 1uF		50V	*	1-647-203-11	PS BOARD			
* CN101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P	1711	L-124-034-51	ELECT	33uF	20%	16V			******			
C806   1-124-887-00   ELECT   3300uF   C811   1-101-006-00   C6RMIC   0.047uF   C877   C877   C879-000-48   C879			< CONNECTOR >						< CAPACITOR >			
C   C   C   C   C   C   C   C   C   C	101 1	l-691-183-11	CONNECTOR (BOAL	RD TO BOARD)	13P		C805	1-124-887-00	ELECT	3300uF	20%	16V
Carrier   Carr							C806	1-124-887-00	ELECT	3300uF	20%	16V
Color   Colo			< 10 >				C811 .	1-101-006-00		0. 047uF		50 <b>Y</b>
Carrell				-			C811	1-136-165-00		0. 1uF	5%	50 <b>V</b>
J101							C812	1-101-006-00	, ,	0. 047uF		50V
Table   Tabl			< JACK >						(A57)			
CRESISTOR   CRES							C812	1-136-165-00	FILM	0. 1uF	5%	50V
C814	102 1	l-565-258-11	JACK, PIN 4P (	CD, VIDEO)			P919	1_161_091_11		0.047	10%	25V
### AC815 1-102-394-11 CERAMIC 0.01uF  ### R101 1-249-417-11 CARBON 1K 5% 1/4W  ### R102 1-249-441-11 CARBON 1OOK 5% 1/4W  ### R103 1-249-441-11 CARBON 1K 5% 1/4W  ### R104 1-249-441-11 CARBON 1OOK 5% 1/4W  ### R105 1-249-441-11 CARBON 82D 5% 1/4W  ### R106 1-247-897-11 CARBON 82D 5% 1/4W  ### R107 1-249-437-11 CARBON 47K 5% 1/4W  ### R108 1-249-417-11 CARBON 1K 5% 1/4W  ### R109 1-249-441-11 CARBON 1K 5% 1/4W  ### R109 1-249-441-11 CARBON 1C 5% 1/4W  ### R109 1-249-441-11 CARBON 1OOK 5% 1/4W  ### R100 1-249-405-11 CARBON 1OOK 5% 1/4W  ### R110 1-249-405-11 CARBON 1OOK 5% 1/4W  ### R111 1-249-423-11 CARBON 1OOK 5% 1/4W  ### R112 1-249-423-11 CARBON 1OOK 5% 1/4W  ### R113 1-249-429-11 CARBON 1OOK 5% 1/4W  ### R114 1-249-417-11 CARBON 1OOK 5% 1/4W  ### R115 1-247-903-00 CARBON 1			/ prejemb \								10%	
R101   1-249-417-11   CARBON   1K   5%   1/4W   C817   1-126-162-11   ELECT   3, 3uf     R102   1-249-441-11   CARBON   100K   5%   1/4W   C822   1-124-920-11   ELECT   330uf     R103   1-249-417-11   CARBON   100K   5%   1/4W   C822   1-124-920-11   ELECT   330uf     R104   1-249-416-11   CARBON   100K   5%   1/4W   C822   1-124-920-11   ELECT   330uf     R105   1-249-416-11   CARBON   820   5%   1/4W   C822   1-124-920-11   ELECT   330uf     R106   1-247-897-11   CARBON   820   5%   1/4W   D801   8-719-302-38   DIODE   RBV-602-01     R107   1-249-437-11   CARBON   47K   5%   1/4W   D806-809     R108   1-249-417-11   CARBON   100K   5%   1/4W   D811   8-719-302-38   DIODE   10E2N     R109   1-249-417-11   CARBON   100K   5%   1/4W   D811   8-719-987-63   DIODE   104146M     R110   1-249-405-11   CARBON   100K   5%   1/4W   D821   8-719-200-77   DIODE   10E2N     R112   1-249-429-11   CARBON   10K   5%   1/4W   ALCP801   1-532-843-21   LINK   IC (PRF2500) (2.5A)     R120   1-249-405-11   CARBON   100K   5%   1/4W   ALCP801   1-532-843-21   LINK   IC (PRF2500) (2.5A)     R122-124   (RESISTOR )   1/4W   ALCP802   1-532-843-21   LINK   IC (PRF2500) (2.5A)     R122-124   (RESISTOR )   1/4W   R803   1-249-428-11   CARBON   8.2K   5%     R152   1-249-441-11   CARBON   1K   5%   1/4W   R803   1-249-428-11   CARBON   8.2K   5%     R152   1-249-441-11   CARBON   100K   5%   1/4W   R804   1-249-428-11   CARBON   8.2K   5%   1/4W			/ uc31310u /								10%	25V 250V
R102 1-249-441-11 CARBON 100K 5% 1/4W C822 1-124-920-11 ELECT 330uF R103 1-249-417-11 CARBON 1K 5% 1/4W C822 1-124-920-11 ELECT 330uF R104 1-249-416-11 CARBON 820 5% 1/4W C822 1-124-920-11 ELECT 330uF C822 1-124-920-	IN1 1	-240-417-41	CARRON	1 l/ CW	1 //9		_				90%	
R103							6017	1-120-102-11	CDECI	o, our	20%	50V
R104 1-249-441-11 CARBON 100K 5% 1/4W							Coon	. 1 104 000 15	01 C/M	220E	200	COU
R105 1-249-416-11 CARBON 820 5% 1/4W							1822	1-124-920-11	ELECT	330H	20%	63V
R107 1-249-437-11 CARBON 47K 5% 1/4W					- 1				< D10DE >			
R107 1-249-437-11 CARBON 47K 5% 1/4W	OR 1	_247_087_11	CADBON	ESUR EA	. 1 /AW		D001	0 710 202 20	NIANE DOS ENA	04		
R109 1-249-441-11 CARBON 100K 5% 1/4W D811 8-719-987-63 DIODE 1N4148M D812 8-719-987-63 DIODE 1N4148M D821 8-719-200-77 DIODE 10E2N  R112 1-249-423-11 CARBON 3. 3K 5% 1/4W SIG LINK >  R113 1-249-429-11 CARBON 10K 5% 1/4W SICP801 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R114 1-249-417-11 CARBON 10D 5% 1/4W AICP802 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R120 1-249-405-11 CARBON 1K 5% 1/4W AICP802 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R122-124 SRESISTOR >  R1249-417-11 CARBON 1K 5% 1/4W R803 1-249-428-11 CARBON 8. 2K 5% R804 1-249-428-11 CARBON 8. 2K 5% SRESISTOR >  R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8. 2K 5%									DIODE KBY-00Z	-01		
R109 1-249-441-11 CARBON 100K 5% 1/4W D811 8-719-987-63 DIODE 1N4148M D812 8-719-987-63 DIODE 1N4148M D821 8-719-200-77 DIODE 10E2N  R112 1-249-423-11 CARBON 3. 3K 5% 1/4W SIG LINK >  R113 1-249-429-11 CARBON 10K 5% 1/4W SICP801 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R114 1-249-417-11 CARBON 10D 5% 1/4W AICP802 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R120 1-249-405-11 CARBON 1K 5% 1/4W AICP802 1-532-843-21 LINK, IC (PRF2500) (2. 5A)  R122-124 SRESISTOR >  R1249-417-11 CARBON 1K 5% 1/4W R803 1-249-428-11 CARBON 8. 2K 5% R804 1-249-428-11 CARBON 8. 2K 5% SRESISTOR >  R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8. 2K 5%	08 1	-249-417-11	CARBON	1K 5%	1/4W			8-719-200-77	DIODE 10E2N			
R110 1-249-405-11 CARBON 100 5% 1/4W							D811					
R112 1-249-423-11 CARBON 3. 3K 5% 1/4W R113 1-249-429-11 CARBON 10K 5% 1/4W R114 1-249-417-11 CARBON 1K 5% 1/4W R115 1-247-903-00 CARBON 1M 5% 1/4W R120 1-249-405-11 CARBON 100 5% 1/4W  R122-124  R122-124	10 5 1	-249-405-11	CARBON					8-719-987-63	DIODE 1N4148M			
R113 1-249-429-11 CARBON 10K 5% 1/4W	12 1	-249-423-11	CARRON	3.3K 5%	1/49		2021	0 119 200-11	PIONE TOREM			
R114 1-249-417-11 CARBON 1K 5% 1/4W R115 1-247-903-00 CARBON 1M 5% 1/4W R120 1-249-405-11 CARBON 100 5% 1/4W  R122-124  R122-124  R122-124  R151 1-249-417-11 CARBON 1K 5% 1/4W R151 1-249-417-11 CARBON 1K 5% 1/4W R152 1-249-441-11 CARBON 100K 5% 1/4W R803 1-249-428-11 CARBON 8. 2K 5% R804 1-249-428-11 CARBON 8. 2K 5%									< IC LINK >			
R115 1-247-903-00 CARBON									/ IV DIAM /			
R120 1-249-405-11 CARBON 100 5% 1/4W							A TOPROT	1-532-843-21	LINK, TO OPPROS	(10) <i>(2</i> 54)	<b>&gt;</b>	
1-249-417-11 CARBON 1K 5% 1/4W R151 1-249-417-11 CARBON 1K 5% 1/4W R803 1-249-428-11 CARBON 8. 2K 5% R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8. 2K 5%			·									
1-249-417-11 CARBON 1K 5% 1/4W R151 1-249-417-11 CARBON 1K 5% 1/4W R803 1-249-428-11 CARBON 8. 2K 5% R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8. 2K 5%	22-124					:			< RESISTOR >			
R151 1-249-417-11 CARBON 1K 5% 1/4W R803 1-249-428-11 CARBON 8.2K 5% R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8.2K 5%			CARRON	1K 5%	1 //Ψ				/ upprotou /			
R152 1-249-441-11 CARBON 100K 5% 1/4W R804 1-249-428-11 CARBON 8.2K 5%						į	B8U3	1-240-429-11	CARRON	8 3K C#	1 1 ZAW	
K153 1-249-417-11 CARBON 1K 5% 1/4W ************************************		-249-417-11		165% 5%	1/4W							hárdair#4
R154 1-249-441-11 CARBON 100K 5% 1/4W							क्राच्याकायाकाची क्री	EM-PAMBABABA		~ · · · · · · · · · · · · · · · · · · ·	· ~ * * * * * * * * * * * * * * * * * *	4.4.10000000000000000000000000000000000
R155 1-249-416-11 CARBON 820 5% 1/4W	.55 1	-249-416-11	CARBON	820 5%	1/49							

The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

## PT S S. PANEL VR

Ref. No.	Part No.	Description		Re	mark	Ref. Mo.	Part No.	Descrip	tion			Re	mark
*	1-647-204-11	PT BOARD				D910 D928	8-719-200-82 8-719-987-63	DIODE	11ES2 1N4148M	ſ		_	
******	******	*****	**********	*****	****	D929 D980 D981	8-719-000-60 8-719-200-82 8-719-987-63	DIODE	UZL-6M2 11ES2 1N4148M				
*	1-647-205-11	S BOARD (UK)				<b>2301</b>	0 710 301 00	< IC >	1111 TOM	ı			
		< CAPACITOR >				IC902	8-759-635-63	IC MS	1943BSL				
C857	1-162-306-11	CERAMIC (UK)	0. 01uF	20%	167			< COIL					
		< CONNECTOR >				L901 L921 L922	1-408-080-00 1-408-121-00 1-408-121-00	INDUCTO	R	100uH 22uH 22uH	I		
* CN850	1-564-506-11	PLUG, CONNECTOR	3P (UK)			0022	1 400 191 00			22011			
		< IC >						< TRANS	1810#C >				
IC852	8-759-947-34	IC LM35DZ (UK	3)			Q901 Q902	8-729-620-05 8-729-620-05			C2603-  C2603-			
		< RESISTOR >						< RESIS	ror >				
R862	1-249-405-11	CARBON *************		1/4W		R623 R624	1-249-441-11 1-249-435-11			100K 33K	5% 5%	1/4W 1/4W	
*	A-4360-078-A	S. PANEL BOARD,				R625 R674 R675	1-249-426-11 1-249-435-11 1-249-426-11	CARBON CARBON		5. 6K 33K 5. 6K	5% 5%	1/4W 1/4W 1/4W	
		< CAPACITOR >				R901	1-249-429-11			10K	5%	1/4W	
C901	1-124-473-11	ELECT	1000uF 📡	20%	10V	R902-9	u4 1-249-433-11	CARBON		22K	5%	1/4W	
C903	1-124-994-11		100uF	20%	107	R905	1-249-441-11	CARBON		100K	5%	1/4W	
C904	1-164-159-11		0. 1uF		50V	R906	1-249-417-11			1K	5%	1/4₩	
C906 C907	1-161-379-00 1-136-159-00		0. 01uF 0. 033uF	20% 5%	25V 50V	R907	1-249-441-11	CARBON		100K	5%	1/4₩	
****			0.000	5.0		R941-9	43						
C908	1-164-159-11	CERAMIC	0. 1uF		50V		1-249-417-11	CARBON		1K	5%	1/4W	
C923	1-126-059-11		10uF	20%	50V		1-249-429-11	CARBON		10K	5%	1/4₩	
C925	1-126-059-11		10uF	20%	50V	R945-9							
C938	1-126-101-11	ELECT	100uF	20%	16V	D040	1-249-417-11			1K	5%	1/4₩	
		< CONNECTOR >				R948 R952	1-249-429-11 1-249-393-11			10K 10	5% 5%	1/4W 1/4W	
						*****	1 510 000 11	VIIIDON		10	0.0	27 344	
* CN602	1-568-826-11	SOCKET, CONNECT	OR 7P		İ	R961	1-249-429-11	CARBON		10K	5%	1/4W	
		SOCKET, CONNECT				R962	1-249-429-11			10K	5%	1/4₩	
* CN901	1-568-834-11	SOCKET, CONNECT	OR 15P			<b>由非市本水本</b> 市	*****	******	******	*****	****	****	****
		< DIODE >				*	A-4360-079-A		), COMPL				
D901	8-719-000-81	DIODE UZL-7L3						र कर कर कर कर कर की है। जन्म					
D902	8-719-987-63	DIODE 1N4148M						< CAPAC	ITOR >				
D903	8-719-200-82					***	4 400 000	phy law descri			_		
D904	8-719-200-82					C627	1-126-300-11			0. 47ul		20%	507
D905	8-719-987-63	DIODE 1N4148M				C628	1-164-159-11			0. 1uF		00**	50V
D908	8-719-987-63	DIANE 1NA1AMA				C677	1-126-300-11			0. 47ul	r	20%	50V
D909	8-719-987-53					C917 C935	1-124-472-11 1-124-443-00			470uF 100uF		20%	10V
1000	0 170 301 09	P10NP 1941408			I	6830	1-174-449-00	PPECI		TOOUL		20%	10V



R	ef. No.	Part No.	Descripti	ion			Remark
			< connect	TOR >			
		1-564-506-11 1-568-828-11					
			< DIODE 3	>			
	D681-6	83					
		8-719-815-85	DIODE 1	IS1585			
	D971	8-719-010-32	DIODE I	JZ-4. 7BSA			
	<b>₽972</b> ⊨	8-719-010-32 8-719-200-82	DIODE 1	11ES2			
	D973	8-719-200-82	DIODE 1	11ES2			
			< 10 >				
	IC904	8-759-820-62	IC LB16	639			
			< TRANSIS	STOR >			
	Q605	8-729-900-63	TRANSISTO	OR DTA12	4ES		
	Q621	8-729-141-26	TRANSISTO	OR 2SC36	22A-	LK	
	Q671	8-729-141-26 8-729-141-26	TRANSISTO	OR 2SC36	22A-	LK	
	Q681	8-729-900-61	TRANSISTO	OR DTA11	4ES		
			< RESISTO	OR >			
	R620	1-249-425-11	CARBON	4.	7K	5%	1/4W
	R621	1-249-417-11	CARBON	18		5%	
	R670	1-249-425-11	CARBON	4.	7K	5%	1/4W
	R671	1-249-417-11	CARBON	1K		5%	1/4W
	R682	1-249-425-11	CARBON	4.	7K	5%	1/4W
	R974	1-249-405-11	CARBON	10	0	5%	1/4W
		1-249-433-11		22		5%	
		1-249-433-11					1/4W
	R977	1-249-412-11	CARBON			5%	1/4W
			< VARIABI	LE RESISTO	R >		
	RV603	1-223-404-11	RES. VAR.	CARBON 1	00K/	100KZ	LOK (VOLUME)
*		*******					

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
17	1-575-905-31	WIRE, FLAT TYPE (9 CORE)	
64	1-690-114-31	WIRE, FLAT TYPE (7 CORE)	
<u> </u>	1-575-654-11	CORD, POWER (AEP, G, IT, EE, EA, MY	, SP)
<u> </u>	1-575-656-11	CORD, POWER (E)	
<u> </u>	1-690-608-11	CORD, POWER (AUS)	
69	1-690-094-11	WIRE, FLAT TYPE (15 CORE)	
70	1-690-992-11	WIRE, FLAT TYPE (7 CORE) (A57)	
<b>∆74</b>	1-575-669-21	CORD, POWER (UK)	
<b>▲</b> F1	1-532-259-00	FUSE, TIME-LAG (T1.6A)	
<u></u> F2	1-532-259-00	FUSE, TIME-LAG (T1.6A)	
∕₹F801	- 1-532-203-00	FUSE, TIME-LAG (T2A)	
		FUSE, TIME-LAG (T2A)	
		TRANSFORMER, POWER (D509)	
		TRANSFORMER, POWER (E. AUS. EA. M.	Y)
		TRANSFORMER, POWER (SP)	

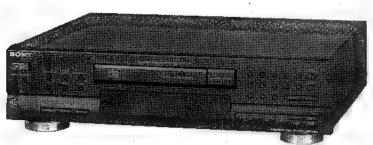
### 

#1 #2 #3 #4	7-621-849-00 7-682-560-04 7-685-650-79 7-685-871-01	SCREW SCREW SCREW	+BVTT +BVTP +BVTT	4X6 3X16 3X6	TYPE2 (S)	
#5 #6 #7	7-682-548-04 7-685-645-79 7-685-646-79	SCREW	+BVTP	3X6	TYPE2	1-S

The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

## CDP-M43/M54

## **SERVICE MANUAL**



CDP-M43 is the CD player section in LBT-D507/ D607/ D707, LBT-A50/A60/A70 series

Photo: CDP-M43

E Model Australian Model AEP Model UK Model E Model

AEP Model UK Model

CDP-M54

Model Name Using Similar Mechanism	CDP-497/597
CD Mechanism Type	CDM-14L-5BD8A
Optical Pick-Up Block Type	BU-58D8A

### **SPECIFICATIONS**

Frequency response	2 Hz to 20 kHz ±0.5 dB
Signal-to-noise ratio	More than 105 dBCDP-M54
-	More than 100 dBCDP-M43
Dynamic range	More than 98 dB ·····CDP-M54
_	More than 92 dBCDP-M43
Harmonic distortion	Less than 0.003%
	Less than 0.004%

Channel separation More than 102 dB .....CDP-M54 More than 95 dB ......CDP-M43

Outputs

LINE OUT (FIXED) (phono jacks)

Compact disc player

Output level | V(at 50 kilohms) Load impedance over 10 kilohms

LINE OUT (VARIABLE)(phono jacks).....CDP-M54

Output level max. 2 V(at 50

kilohms)

Load impedance over 50 kilohms

PHONES (stereo phone jack)······CDP-M54

Output level max, 10 mW Load impedance 32 ohms

General

Power requirements

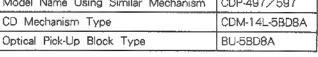
European model:

220 - 230V AC, 50/60Hz UK, Australian model: 240 V AC, 50Hz

E model:

110 - 120, 220 - 240V AC,

50/60Hz



### Power consumption

12 W

Dimensions (approx., including projections)

 $355 \times 95 \times 325 \text{ mm(w/h/d)}$ 

 $(14 \times 3\% \times 12\% \text{ inches})$ 

Weight (approx.)

3.2 kg (7 lbs 1 oz)

Remote commander

(RM-D597).....CDP-M54

Remote control system-

Infrared control

Power requirements

3 V DC with two R6 (size AA) batteries

Dimensions (approx., including projections)

40 × 20 × 175 mm (w/h/d)

(15/8 × 1/16 × 7 inches)

Weight (approx.)

95 g(4 oz)

Supplied accessories

Audio cord

(1)(2 Phono plugs-2 phono plugs)

Remote commander

(1)-----CDP-M54

Sony SUM-3 (NS) batteries

(2)-----CDP-M54

Design and specifications are subject to change without notice.

CLASS 1 LASER PRODUCT LUOKAN 1 LASERLAITE KLASS 1 LASERAPPARAT

This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the rear exterior.

COMPACT DISC PLAYER SONY



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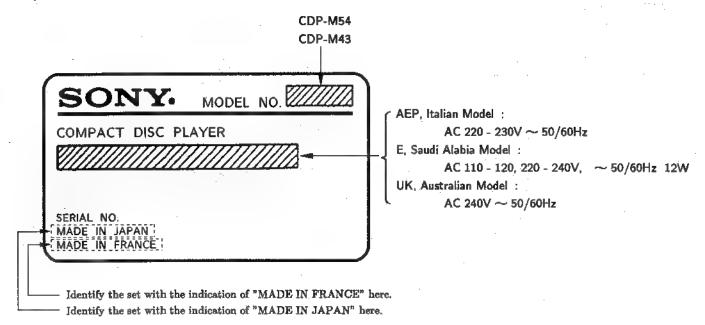
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### SAFETY-RELATED COMPONENT WARNINGIL

COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### **MODEL IDENTIFICATION**

- Specification Label -



## NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

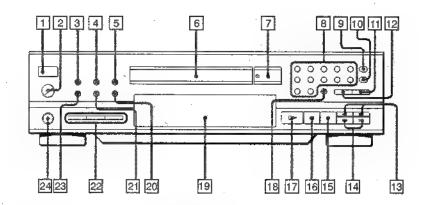
### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30cm away from the objective lens.

## SECTION 1 GENERAL

This section is extracted from instruction manual.

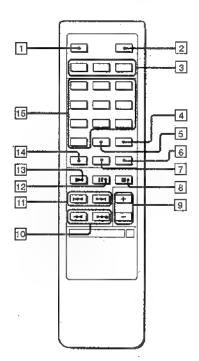
## 1-1 IDENTIFYING THE PARTS CDP-M54 model



### **Front Panel**

- 1 POWER switch (20)
- 2 LINE OUT/PHONE LEVEL control (14)
- 3 MUSIC SCAN button (40)
- 4 A.SPACE/A.CUE button (28, 62)
- 5 PEAK SEARCH button (60)
- 6 Disc tray (20)
- 7 A OPEN/CLOSE button (20)
- B Numeric buttons (24, 38, 48, 52)
- 9 EDIT/TIME FADE button (52, 58)
- 10 TIME SET button (54, 58)
- 11 CLEAR (program clear) button (36, 42)
- 12 CHECK (program check) button (36)
- (26, 46)
  (manual search) buttons
- 14 ► (AMS\*) buttons (24, 48)

- 15 (stop) button (22)
- 16 **II** (pause) button (22)
- 17 ► (play) button (22)
- 18 > 12 (over 12) button (24)
- 19 Display window (20)
- 20 FADER button (46)
- 2 REPEAT button (44)
- 22 Play mode buttons
  - CONTINUE button (30, 34, 38, 56) SHUFFLE button (30, 34, 38, 56) PROGRAM button (34, 48)
- 23 TIME button (22)
- 24 PHONES jack
- AMS is the abbreviation of Automatic Music Sensor.



### **Remote Commander**

·····CDP-M54

- 1 A. SPACE/A. CUE button (28, 62)
- 2 MUSIC SCAN button (40)
- 3 Play mode buttons

CONTINUE button (30, 34, 38, 56) SHUFFLE button (30, 34, 38, 56) PROGRAM button (34, 48)

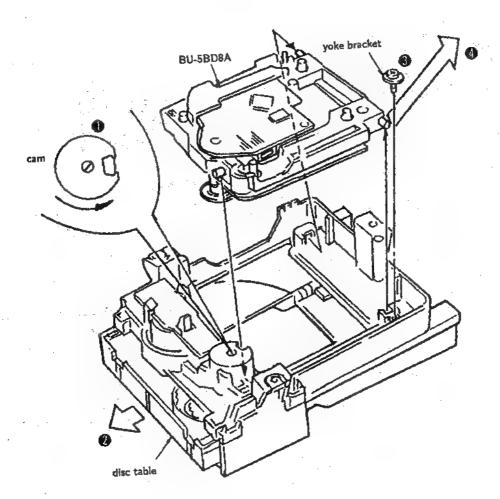
- 4 CLEAR (program clear) button (36, 42)
- 5 > 10 (over 10) button (24)
- 6 FADER button (46)
- 7 REPEAT button (44)
- 8 (stop) button (22)
- LINE OUT LEVEL buttons (14)
- (26, 46) (manual search) buttons
- [ii] ► (AMS\*) buttons (24, 48)
- 12 II (pause) button (22)
- 13 ► (play) button (22)
- 14 TIME button (22)
- 15 Numeric buttons (24, 38, 48, 52)
- AMS is the abbreviation of Automatic Music Sensor.

### SECTION 2 DISASSEMBLY

Note:

Follow the disassembly procedure in the nomerical order given.

- 1 Turn the cam to the direction of arrow (Counter clock wise) by minus screw driver.
- ? Take off the disc table.
- 3 Remove the yoke bracket.
- 4 Remove the MD (BU-5BD8A) to the direction of BITOW.

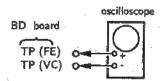


## SECTION 3 ELECTRICAL BLOCK CHECKING

### Note:

- CD Block basically constructed to operate with-out adjustment. Therefore, check each item in order given.
- Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
- 3. Use the oscilloscope with more than 10MΩ im-pedance.
- Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

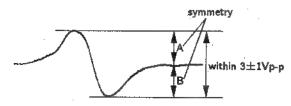
### S Curve Check



### Procedure:

- Connect oscilloscope to test point TP (FE) on BD board.
- 2. Connect between test point TP (FEI) and TP (VC) by lead wire.
- Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
- Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.

### S curve waveform

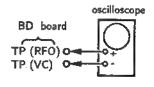


5. After check, remove the lead wire connected in step 2.

Note: • Try to mesure several times to make sure that the ratio of A: B or B: A is more than 10:7.

 Take sweep time as long as possible and light up the brightness to obtain best waveform.

### **RF Level Check**

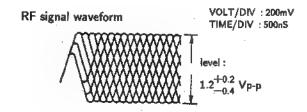


### Procedure:

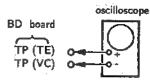
- Connect oscilloscope to test point TP (RFO) on BD board.
- 2. Turn Power switch on.
- 3. Put disc (YEDS-18) in and playback.
- Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

### Note:

Clear RF signal waveform means that the shape "\rightharpoonum" on be clearly distinguished at the center of the waveform.



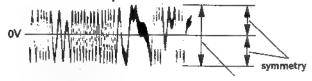
### E-F Balance Check



### Procedure:

- Connect test point TP (ADJ) to ground and TP (TEI) to TP (VC) with lead wire.
- Connect oscilloscope to test point TP (TE) on BD board.
- 3. Turn Power switch on.
- 4. Put disc (YEDS-18) in and playback.
- Confirm that the osilloscope waveform is sym-metrical on the top and bottom in relation to 0V, and check this level.

Traverse oscilloscope



level: 2±1Vp-p

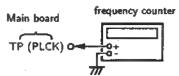
6. Remove the lead wire connected in step 1.

## SECTION 4 DIAGRAMS

### RF PLL Free-run Frequency Check

### Procedure:

 Connect frequency counter to test point (PLCK) with lead wire.

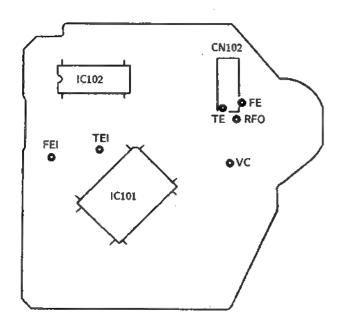


- 2. Turn Power switch on.
- Confirm that reading on frequency counter is 4. 3218
   MHz.

### **Adjustment Location:**

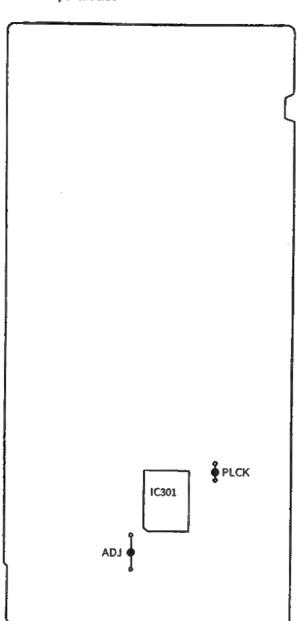
### [BD BOARD]

- Solder side -

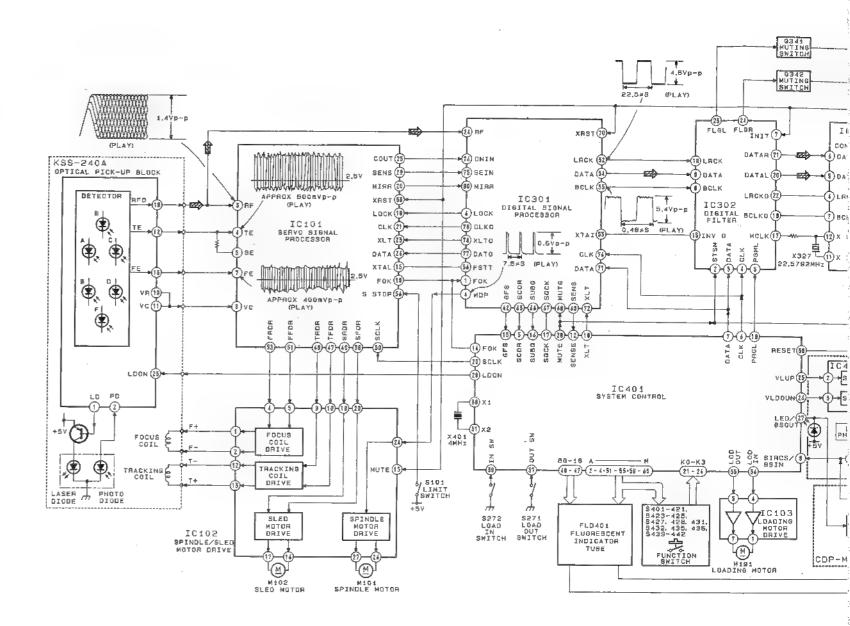


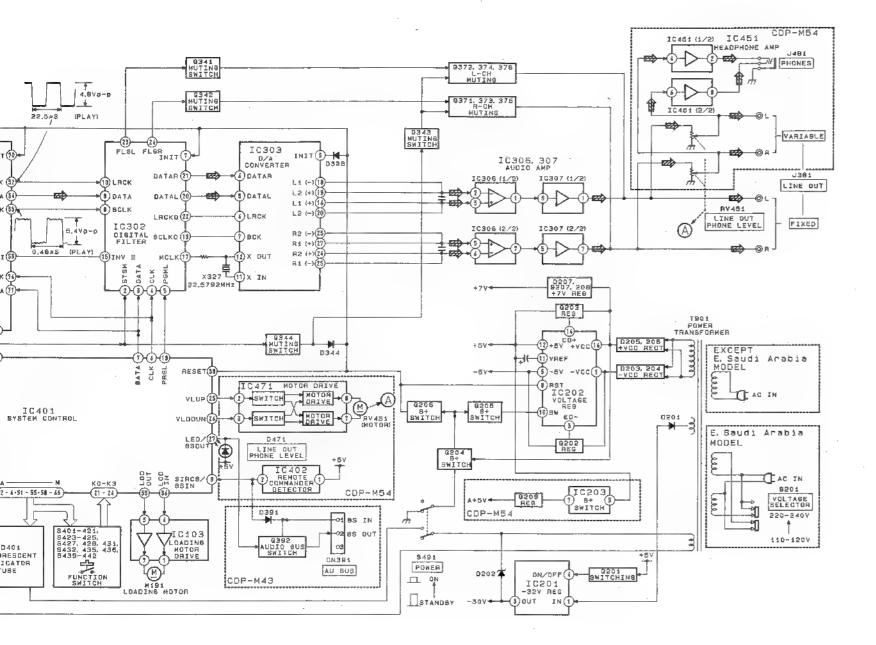
### [MAIN BOARD]

- Component side -

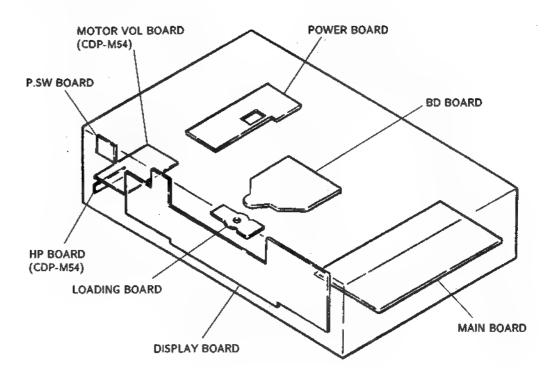


### 4-1 BLOCK DIAGRAM





### 4-2 CIRCUIT BOARDS LOCATION



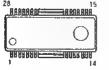
### 4-3 SEMICONDUCTOR LEAD LAYOUTS

BA6208 RC4556S 2SB1094-LK





### BA6297AFP







CXD2500AQ



2SD774-34



CXD2501Q



RD5.6ES-B2 RD7.5ES-B2 RD7.5JS-B2 RD9.1ES-L 11ES2



DTA144ES DTC114ES DTC144ES 2SC2458-YGR



1N4148M 10E2









BR4361F

### • SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location	
D201 D202 D203 D204 D205	J - 16 J - 15 I - 16 I - 16 I - 16	IC203 IC301 IC302 IC303 IC306	B-7 D-12 D-10 D-9 D-7	
D206 D207 D208 D209 D328	1-16 B-10 B-6 B-6 E-10	IC307 IC401 IC402 IC451 IC471	D-6 H-6 G-9 B-2 B-3	
D344 D391 D401 D402 D403	D-11 E-5 H-12 H-12 H-12	Q201 Q202 Q203 Q204	J - 15 B - 8 C - 8 B - 11	
D404 D405 D406 D407 D408	H - 11 H - 11 H - 11 I - 13 H - 11	Q205 Q206 Q207 Q208 Q209 Q341	C-11 C-11 B-10 B-10 C-6 E-7	
D409 D410 D411 D412 D471	H - 10 H - 10 H - 10 H - 7 D - 3	Q342 Q343 Q344 Q371 Q372	E-7 E-7 D-11 D-6 B-6	
IC101 IC102 IC103 IC201 IC202	C - 16 B - 16 B - 17 J - 15 B - 8	Q373 Q374 Q375 Q376 Q392	D-5 B-6 D-5 B-6	

### Note:

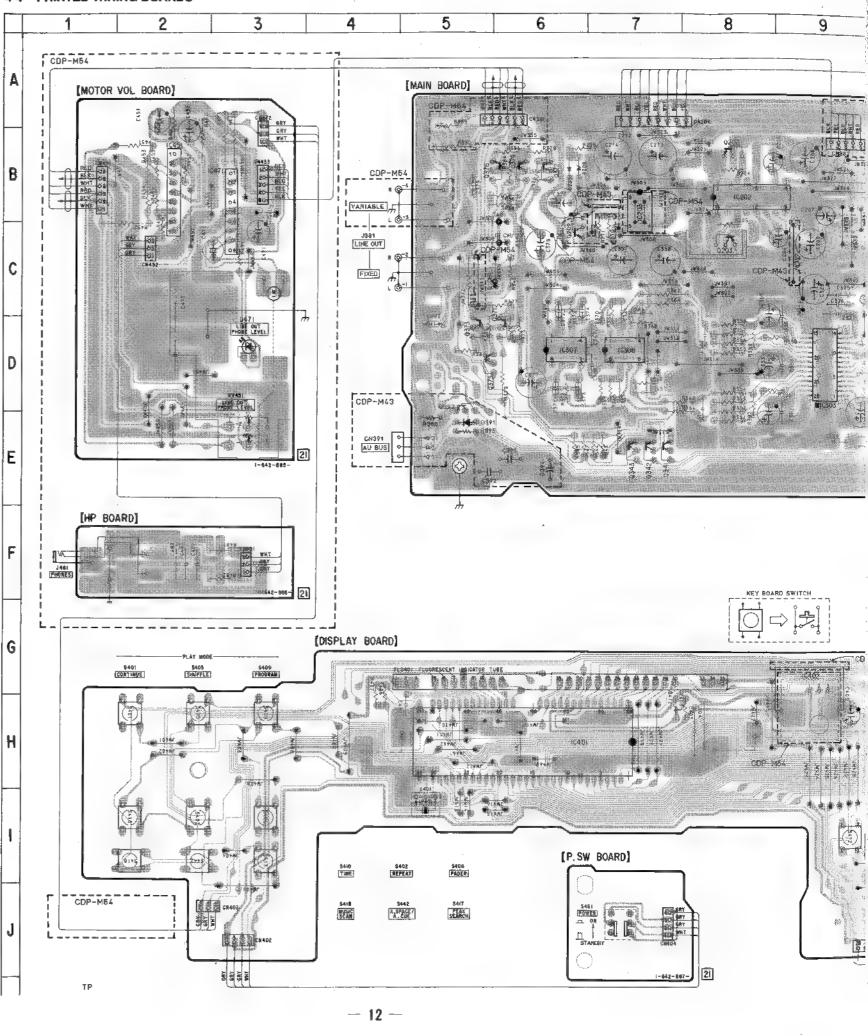
O parts extracted from the component side.
parts mounted on the conductor side.

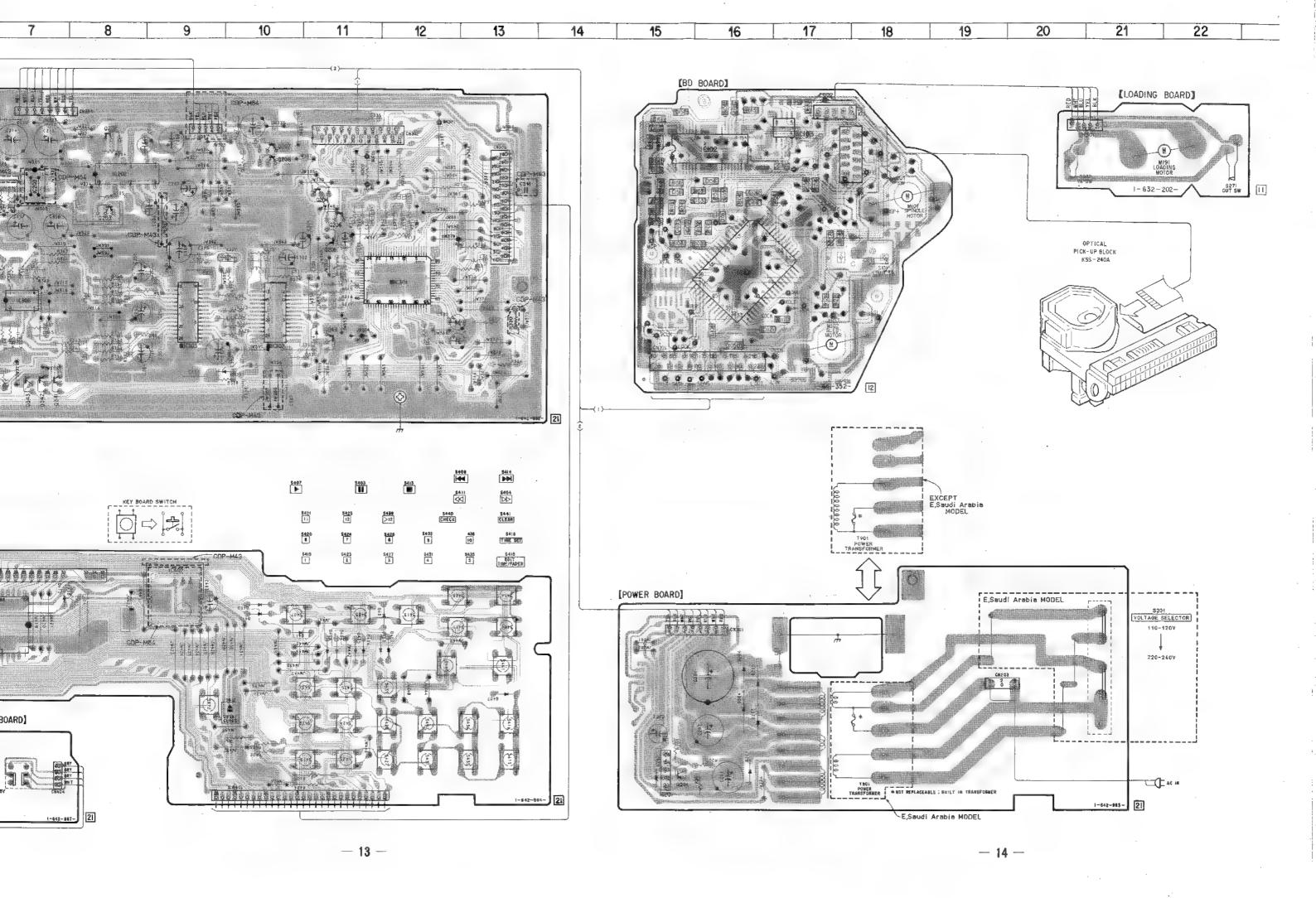
: Through hole.

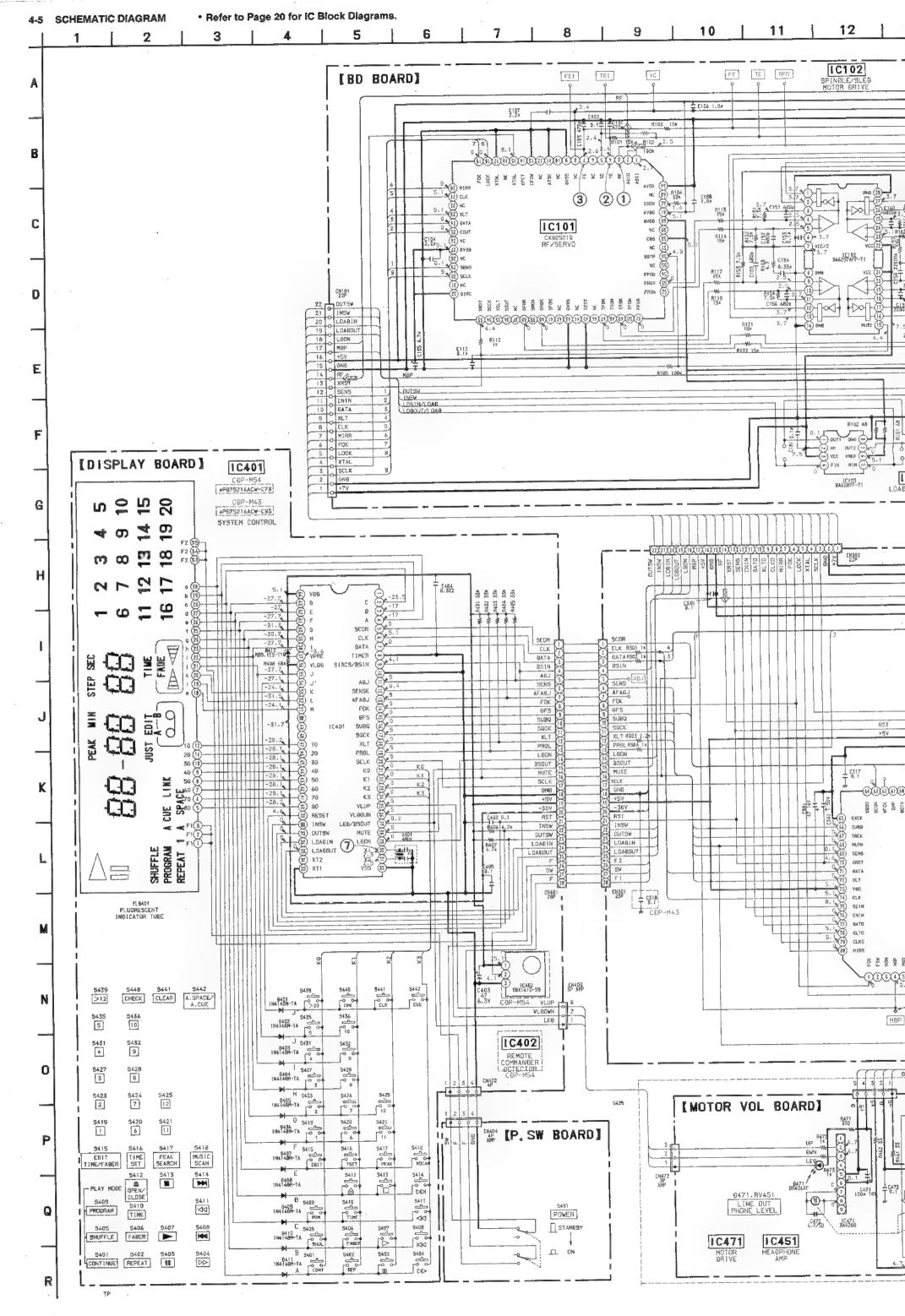
Pattern on the side which is seen.

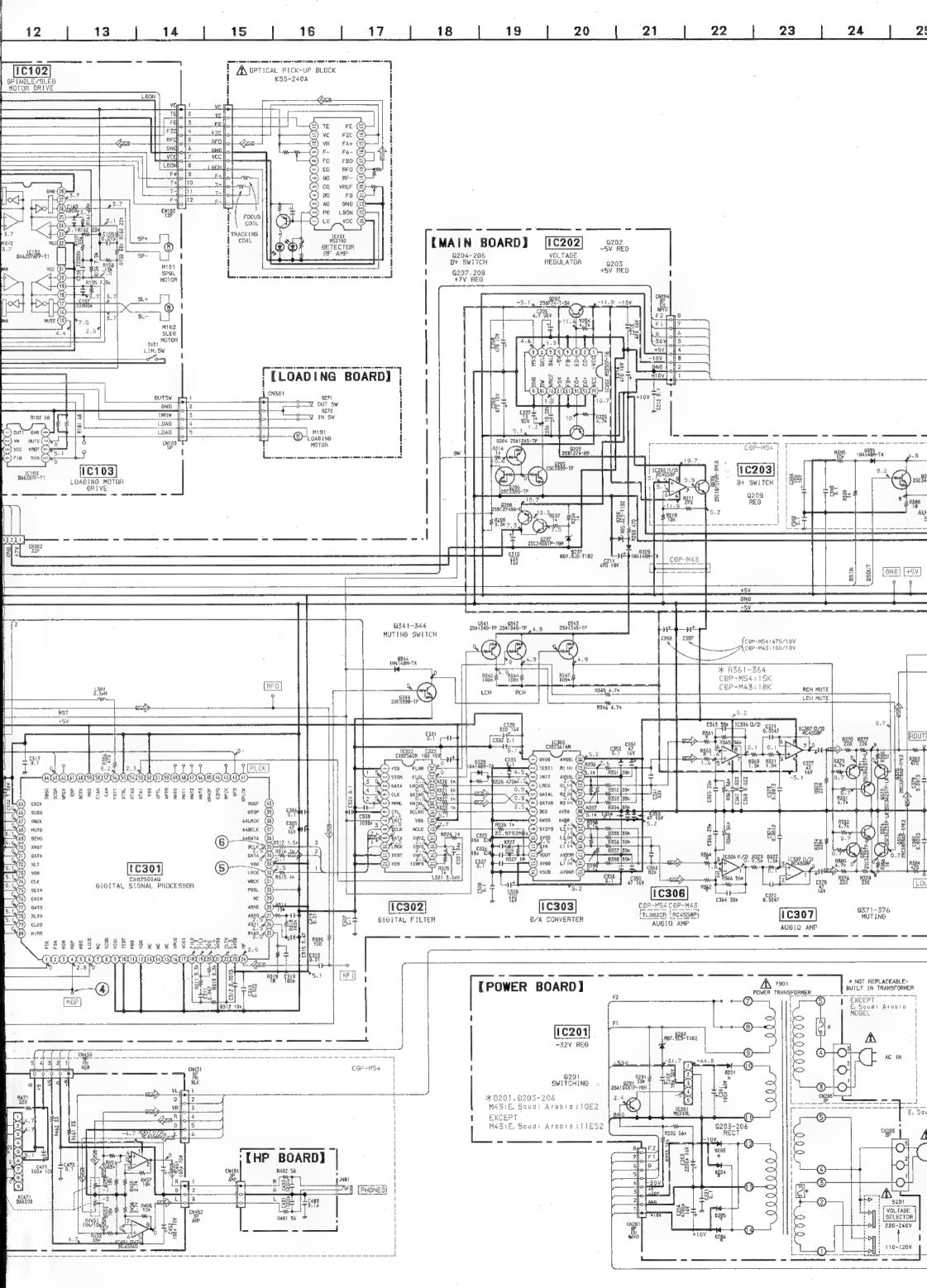
• :: Pattern of the rear side.

### 4-4 PRINTED WIRING BOARDS

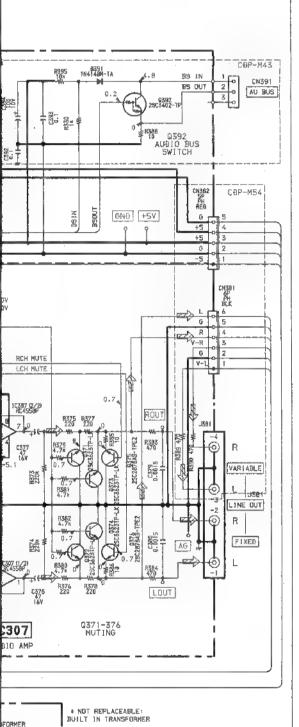








24 25 26



EXCEPT E, Saudi Arabia MOBEL

AC IN

CN203

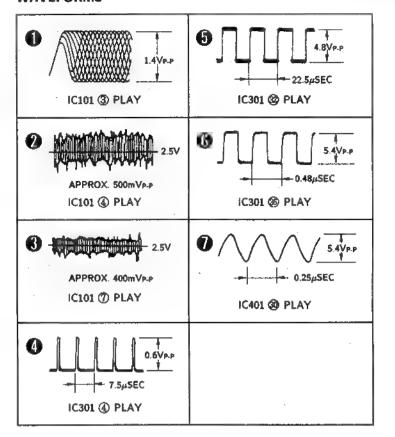
E. Soudi Arobio MOĐEL

Δ

AC IN

7000000

### **WAVEFORMS**



### FLD401

	8G	7 <b>G</b>	6G	5G	4G	3G	2G	1G
a	a							3
6								4
	f g b							5
d	. <b>i</b> - i -						6	8
ė							7	9
f								10
.01								
h	-		PEAK	MIN	STEP	SEC	11	13
i	11		-	•			12	14
j	SHUFFLE		TZUL	EDIT		TIME		15
k	PROGRAM		A. CUE	A		111-	16	111
1	REPEAT		LINK	п		Ŧ	17	19
m	1		A. SPACE	(مـَه)		FADE		20

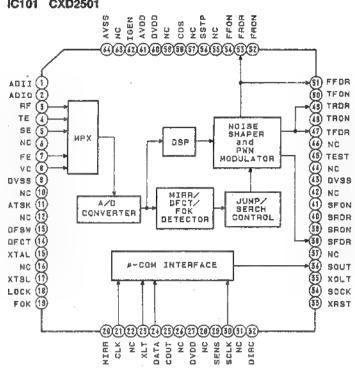
- All capacitors are in  $\mu\,F$  unless otherwise noted, pF:  $\mu\,\mu\,F$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Q and ¼W or less unless otherwise specified.
- : internal component.

Note: The components identified by mark A or dotted line with mark A are critical for safety. Replace only with part number specified.

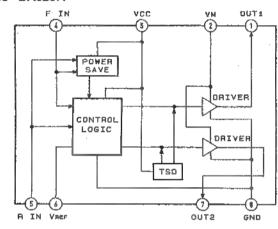
- : B + Line
- - : B Line
- · Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- · no mark : STOP
- Voltages are taken with  $\blacksquare$  VOM (Input impedance 10M  $\Omega$  ). Voltage variations may be noted due to normal production tolerances.
- · Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- · Circled numbers refer to waveforms.
- Signal path.
  - 📂 : CD

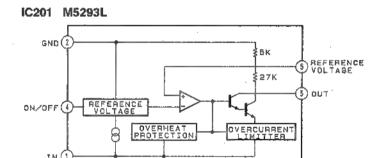
#### 4-6 IC BLOCK DIAGRAM

#### IC101 CXD2501

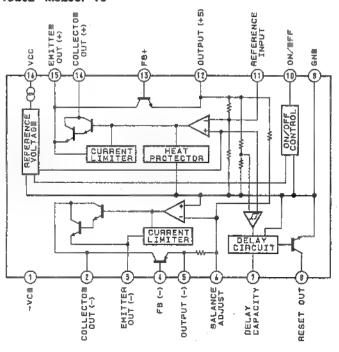


#### IC103 BA6287F

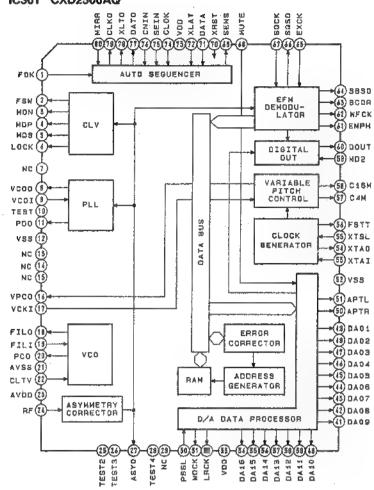




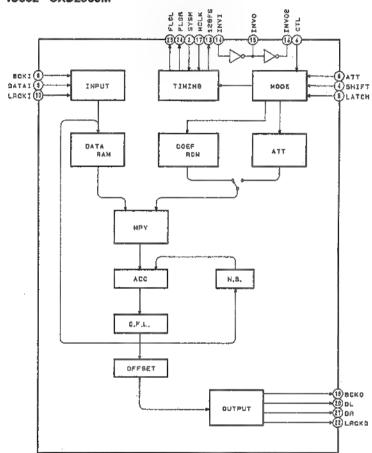
#### IC202 M5290P-16



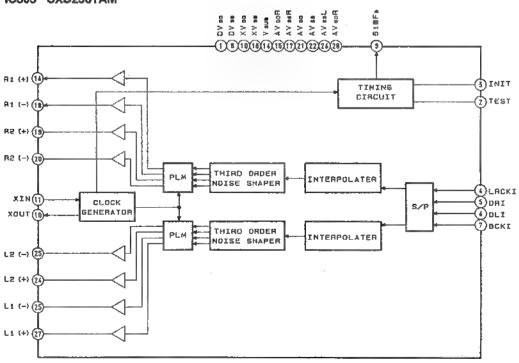
#### IC301 CXD2500AQ



#### IC302 CXD2560M



#### IC303 CXD2561 AM



### SECTION 5 EXPLODED VIEWS

#### NOTE

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts Example:
   KNOB, BALANCE (WHITE).... (RED)

Parts color Cabinet's color

 Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

 The mechanical parts with no reference number in the exploded views are not supplied.

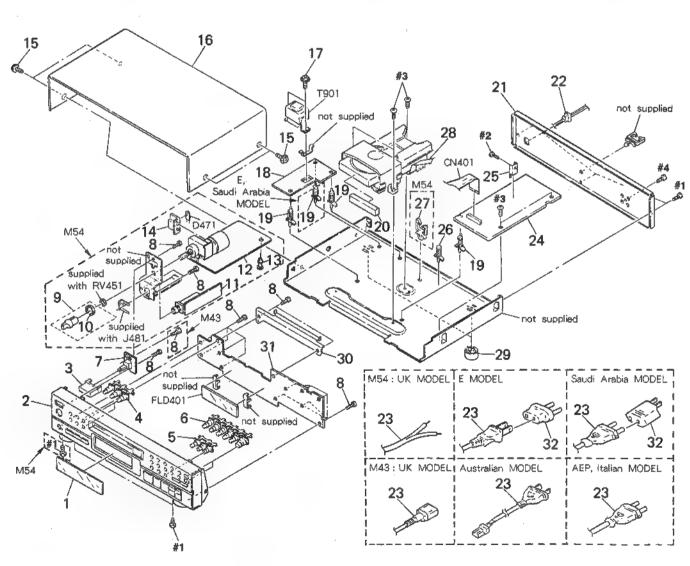
Hardware (# mark) list is given in the last of this parts list.

The components identified by mark or dotted line with mark hare critical for safety.

Replace only with part number specified.

When indicating parts by reference number, please include the board.

#### 5-1 CABINET SECTION



	1	4-950-182-01	PLATE, INDICATION (M54)
	1	4-950-182-11	PLATE, INDICATION (M43)
	2	X-4942-345-1	PANEL ASSY, FRONT (BLACK) (M54)
			PANEL ASSY, FRONT
	_		(GRAY) (EXCEPT M54/M43: Italian
	2	X-4942-347-1	PANEL ASSY, FRONT (BLACK) (M43: Italian
	3	4-950-176-01	BUTTON (POWER) (GRAY) (EXCEPT M54/M43: Italian)
	3	4-950-176-11	BUTTON (POWER) (BLACK) (M54/M43:Italian
	4	4-950-177-01	BUTTON (G) (GRAY) (EXCEPT M54/M43: Italian)
	4	4~950-177-11	BUTTON (G) (BLACK) (M54/M43:Italian)
	5	4-950-179-01	BUTTON (MC/B)
			(GRAY) (EXCEPT M54/M43:Italian)
	5	4-950-179-11	BUTTON (MC/B) (BLACK) (M54/M43:Italian)
	6	4-950-178-01	BUTTON (MC/A) (GRAY) (EXCEPT M54/M43: Italian)
	6	4-950-178-11	BUTTON (MC/A) (BLACK) (M54/M43:Italian)
÷	7	1-642-887-21	P. SW BOARD
	8		SCREW, +BV (2.6X8) TAPPING
	9	A-4604-901-A	KNOB (HP) ASSY (M54)
	10	4-948-469-01	SPRING, RING (M54)
	11	1-642-886-21	HP BOARD (M54)
*	12	A-4649-107-A	MOTOR VOL BOARD, COMPLETE (M54)
₩.	13	3-676-567-00	SPACER (M54: E, AEP)
4	14	4-922-980-01	HOLDER (LED) (M54)
	15	3-363-099-01	SCREW (CASE +3X8 TP2) (MADE IN FRANCE)
	15	3-704-366-01	SCREW (CASE) (M3X8) (MADE IN JAPAN)
	16	4-919-376-31	CASE (BLACK) (M54/M43: Italian)
	16	4-919-376-81	CASE (GRAY) (EXCEPT M54/M43:Italian)
	17	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6
	18	1-642-883-21	
*	19	4-924-098-31	HOLDER, PC BOARD
	20	4-950-174-01	PANEL, LOADING (GRAY) (EXCEPT M54/M43: Itarian)
	20	4-950-174-11	PANEL, LOADING (BLACK) (MS4)
			PANEL, LOADING (BLACK) (M43: Italian)

Description

Ref. No. Part No.

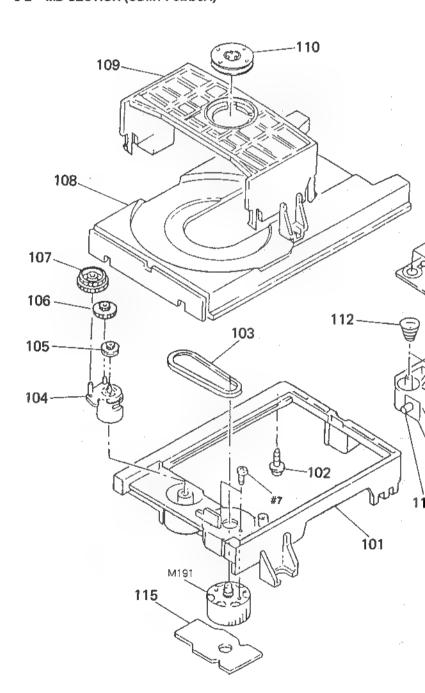
1	4-950-182-01	PLATE, INDICATION (M54)
h	4-950-182-11	PLATE, INDICATION (M43)
2	X-4942-345-1	PANEL ASSY, FRONT (BLACK) (M54)
2		PANEL ASSY, FRONT
-	11 1012 010 1	(GRAY) (EXCEPT M54/M43: Italian)
2	X-4942-347-1	PANEL ASSY, FRONT (BLACK) (M43:Italian)
3	4-950-176-01	BUTTON (POWER) (GRAY) (EXCEPT M54/M43: Italian)
3	4-950-176-11	BUTTON (POWER) (BLACK) (M54/M43:Italian)
4	4-950-177-01	BUTTON (G) (GRAY) (EXCEPT M54/M43: Italian)
4	4-950-177-11	BUTTON (G) (BLACK) (M54/M43: Italian)
5	4-950-179-01	BUTTON (MC/B) (GRAY) (EXCEPT M54/M43: Italian)
5	4-950-179-11	BUTTON (MC/B) (BLACK) (M54/M43: Italian)
6	4-950-178-01	BUTTON (MC/A) (GRAY) (EXCEPT M54/M43:Italian)
6	4-950-178-11	BUTTON (MC/A) (BLACK) (M54/M43:Italian)
7	1-642-887-21	P. SW BOARD
8	4-928-635-01	SCREW, +BV (2.6X8) TAPPING
9	A-4604-901-A	KNOB (HP) ASSY (M54)
10	4-948-469-01	SPRING, RING (M54)
11	1-642-886-21	HP BOARD (M54)
12	A-4649-107-A	MOTOR VOL BOARD, COMPLETE (M54)
13	3-676-567-00	SPACER (M54:E, AEP)
14	4-922-980-01	HOLDER (LED) (M54)
15	3-363-099-01	SCREW (CASE +3X8 TP2) (MADE IN FRANCE)
15	3-704-366-01	SCREW (CASE) (M3X8) (MADE IN JAPAN)
16	4-919-376-31	CASE (BLACK) (M54/M43:Italian)
16	4-919-376-81	CASE (GRAY) (EXCEPT M54/M43:Italian)
17		SCREW, S TIGHT, +PTTWH 3X6
18	1-642-883-21	
19	4-924-098-31	HOLDER, PC BOARD
20	4-950-174-01	PANEL, LOADING (GRAY) (EXCEPT M54/M43:Itarian)
20	4-950-174-11	PANEL, LOADING (BLACK) (M54)
20	4-950-174-21	PANEL, LOADING (BLACK) (M43: Italian)

Description

f. No. Part No.

Ref. No.	Part No.	Description Remai	rk
* 21	4-941-467-11	PANEL (ALSACE), BACK (MADE IN FRANCE M43:AEP, Italian, U	- N
21	4-941-552-21	PANEL (ALSACE), BACK (MADE IN JAPAN M54:AEP, UK)	JIN,
* 21	4-949-433-01	PANEL, BACK (MADE IN JAPAN M54:AEP)	
<b>*</b> 21		PANEL, BACK (M54:E)	
* 21	4-949-433-41	PANEL, BACK (MADE IN FRANCE M43:AEP)	ľ
		PANEL, BACK (M43:E, Saudi Arabia)	
* 21	4-949-433-61	PANEL, BACK (M43:Australian)	
* 22	3-703-244-00	BUSHING (2104), CORD (EXCEPT E)	
* 22	3-703-571-11	BUSHING (S) (4516), CORD (E)	
<b>1</b> 23	1-558-946-21	CORD, POWER (M54:UK)	
A23	1-574-358-31		
		(WITH CONNECTOR) (Australian)	
		CORD, POWER (AEP, Italian, Saudi Arab	ia,
		CORD, POWER (E)	
<u>A</u> \23	1-590-379-11	CORD, POWER (M43:UK)	
* 24	A-4649-105-A	MAIN BOARD, COMPLETE (M54)	
* 24	A-4649-111-A	MAIN BOARD, COMPLETE (M43)	
* 25	4-941-237-01	HEAT SINK (M54:UK)	
25	4~902~345~01	HEAT SINK (EXCEPT M54:UK)	
		HOLDER, PC BOARD	
* 27		HOLDER, WIRE (M54)	
		WIRE, FLAT TYPE (22 CORE)	
29	4-931-169-01		
30	4-950-180-01	REINFORCEMENT (MD)	
* 31	A-4649-104-A	DISP BOARD, COMPLETE (M54)	
<b>*</b> 31	A-4649-110-A	DISP BOARD, COMPLETE (M43)	
<b>∱</b> 32	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
<b>A</b> 32	1-569-008-11	ADAPTER, CONVERSION 2P (Saudi Arabia	a)
CN401	1-535-987-11	JAMPER, FILM (WITH TERMINAL)	
D471	8-719-970-49	DIODE BR4361F (M54)	
<u> </u>	1-449-922-11	TRANSFORMER, POWER (EXCEPT E, Saudi Arabia)	
A.T001	1-440-093-11	TRANSFORMER, POWER (E, Saudi Arabia)	

### 5-2 MD SECTION (CDM14-5BD8A)



Ref. No.	Part No.	Description	Remark
101	4-933-111-01	CHASSIS (MD) (MADE III JAF	AN)
101	4-933-111-11	CHASSIS (MD) (MADE IN FRA	INCE)
+ 102	4-917-583-21	BRACKET, YOKE	
103	4-927-649-01	BELT	
104	4-933-109-01	CAM	
105	4-927-651-01	PULLEY (S)	
106	4-927-628-01	GEAR (C)	
107	4-933-107-01	GEAR (PL)	
108	4-948-894-01	TABLE (ALS), DISK (MADE	IN FRANCE)
108	4-949-336-01	TABLE, DISK (MADE IN JAN	PAN)

Ref. No.

112

113 114 \* 115 M191

### 5-2 MD SECTION (CDM14-5BD8A)

Ref. No. Part No.

\* 21

21

\* 21

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Description

4-941-467-11 PANEL (ALSACE), BACK

4-941-552-21 PANEL (ALSACE), BACK

4-949-433-22 PANEL, BACK (MS4:E)

4-949-433-51 PANEL, BACK (M43:E, Saudi Arabia)

3-703-244-00 BUSHING (2104), CORD (EXCEPT E)

(WITH CONNECTOR) (Australian)

4-949-433-61 PANEL, BACK (M43:Australian)

3-703-571-11 BUSHING (S) (4516), CORD (E)

1-558-946-21 CORD, POWER (M54:UK)

1-590-379-11 CORD, POWER (M43:UK)

4-941-237-01 HEAT SINK (M54:UK)

3-349-025-41 HOLDER, PC BOARD

4-931-169-01 FOOT

4-314-320-00 HOLDER, WIRE (M54)

4-950-180-01 REINFORCEMENT (MD)

A-4549-105-A MAIN BOARD, COMPLETE (M54)

A-4649-111-A MAIN BOARD, COMPLETE (M43)

4-902-345-01 HEAT SINK (EXCEPT M54:UK)

1-575-160-11 WIRE, FLAT TYPE (22 CORE)

A-4649-104-A DISP BOARD, COMPLETE (M54)

A-4649-110-A DISP BOARD, COMPLETE (M43)

1-569-007-11 ADAPTER, CONVERSION 2P (E)

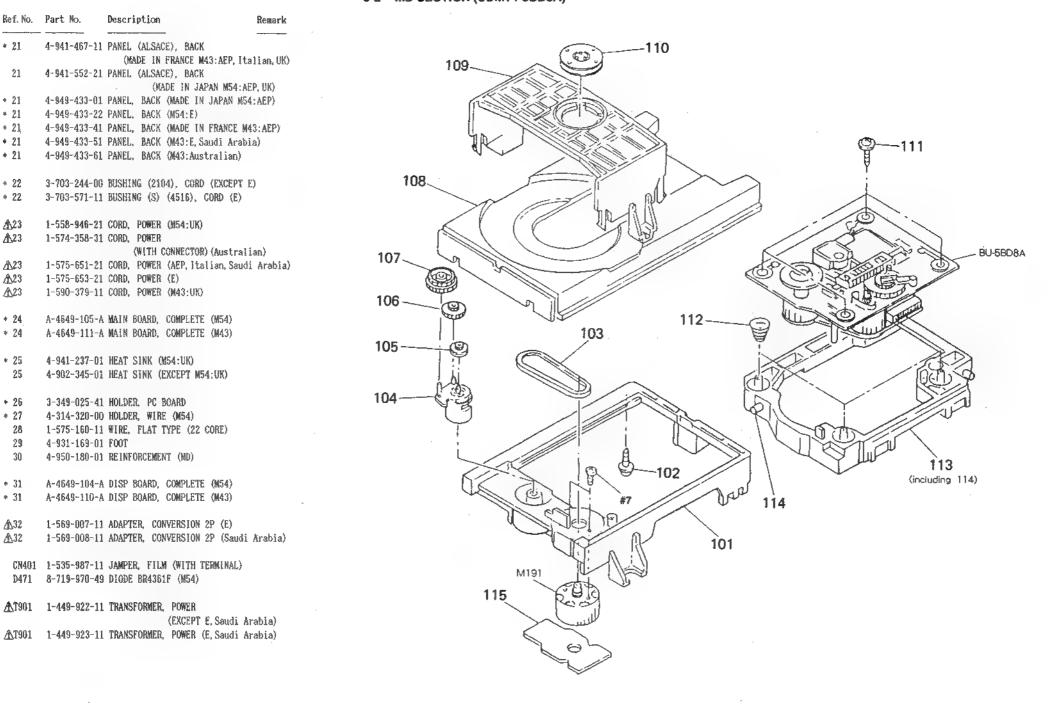
CN401 1-535-987-11 JAMPER, FILM (WITH TERMENAL)

D471 8-719-970-49 DIODE BR4361F (M54)

↑T901 1-449-922-11 TRANSFORMER, POWER

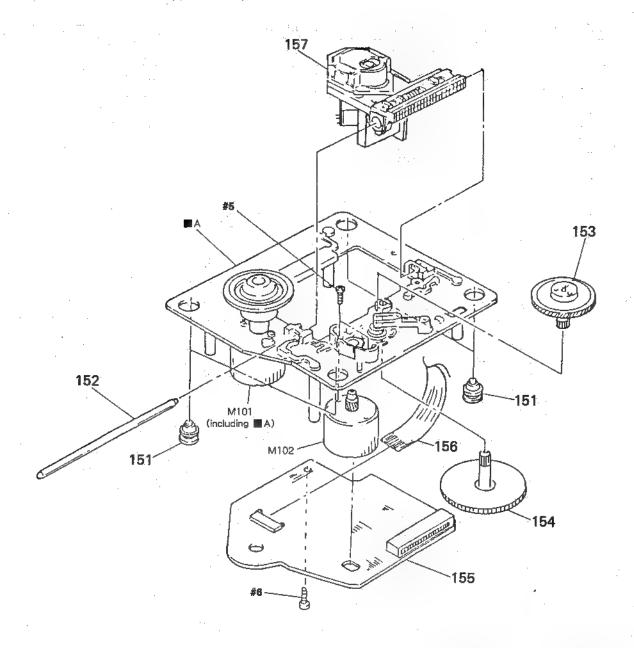
1-574-358-31 CORD, POWER

1-575-653-21 CORD, POWER (E)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-933-111-01	CHASSIS (MD) (MADE IN JAPAN)		109	4-933-110-01	HOLDER (MG)	
101	4-933-111-11	CHASSIS (MD) (MADE IN FRANCE)		* 110	1-452-538-11	MAGNET	
				111	4-933-134-01	SCREW (+PTPWH M2, 6X6)	
* 102	4-917-583-21	BRACKET, YOKE					
103	4-927-649-01	BELT		112	4-917-541-01	SPRING (B) (MADE IN FRANCE)	
104	4-933-109-01	CAM		112	4-948-503-01	SPRING (BU), COMPRESSION	
105	4-927-651-01	PULLEY (S)				(MADE IN JAPAN)	
106	4-927-628-01	GEAR (C)	,				
107	4-933-107-01	GEAR (PL)		113	4-933-129-01	HOLDER (BU)	
				114	4-933-108-01	SHAFT (CAM)	
108	4-948-894-01	TABLE (ALS), DISK (MADE IN FRA	NCE)	* 115		LOADING BOARD	
108		TABLE, DISK (MADE IN JAPAN)		M191	A-4604-363-A	MOTOR (L) ASSY	

#### 5-3 OPTICAL PICK-UP BLOCK (BU-55BD8A)



Note: The components identified by mark A or dotted line with mark A are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
151	4-933-126-01	INSULATOR (A)	
152	4-917-565-01	SHAFT, SLED	
153	4-917-567-01	GEAR (M)	
154	4-917-564-01	GEAR (P), FLATNESS	
• 155	A-4617-977-A	BD BOARD, COMPLETE	
156	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
157 €	8-848-144-11	DEVICE, OPTICAL KSS-240A	
M101	X-4917-523-3	BASE (OUTSERT) ASSY	
M102	X-4917-504-1	MOTOR ASSY	

### BD

### SECTION 6 **ELECTRICAL PARTS LIST**

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS All resistors are in ohms METAL: Metal-film resistor METAL OXIDE: Metal oxide film resistor F: nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anti-cipated when ordering these items.
- SEMICONDUCTORS In each case, u: µ, for example: uA.....μA...., uPA....μPA.... uPB....:μPB...., uPC....μPC.... uPD....:μPD.... • CAPACITORS
- uF: µF
- COILS  $uH: \mu H$

The components identified by mark A or dotted line with mark A are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Rei	nark		Ref. No.	Part No.	Description			Remark
	A-4617-977-A	BD BOARD, COMPLETE		<del></del>				< RESISTOR >			
		*****									
					1	R101	1-216-077-00	METAL CHIP	15K	5%	1/10₩
		< CAPACITOR >		1		R102	1-216-097-00	METAL CHIP	100K	5%	1/10W
		•				R103	1-216-077-00		15K	.5%	1/10\
C101	1-163-005-11	CERAMIC CHIP 470PF	10%	50V		R104	1-216-085-00	METAL CHIP	33K	5%	1/10\
C102	1-163-038-00	CERAMIC CHIP " 0. 1uF		25V		R105	1-216-097-00	METAL CHIP	100K	5%	1/10₩
C103	1-163-005-11	CERAMIC CHIP 470PF	10%	50Y						e.	
C104	1-164-505-11	CERAMIC CHIP 2. 2uF		16V		R112	1-216-049-00		1K	5%	1/10W
C105	1-135-155-21	TANTALUM CHIP 4.7uF	10%	16V		. R113	1-216-077-00		15K	5%	1/10W
					-	R114	1-216-077-00	METAL CHIP	15K	5%	1/10₩
C106	1-164-346-11	CERAMIC CHIP 1uF		16V		R117	1-216-077-00		15K	5%	1/10W
C107	1-164-505-11	CERAMIC CHIP 2. 2uF		16V	.	R118	1-216-077-00	METAL CHIP	15K	5%	1/10W
C108	1-164-346-11	CERAMIC CHIP 1uF		16V							
C112	1-163-038-00	CERAMIC CHIP 0.10F		. 25V		R121	1-216-077-00	METAL CHIP	. 15K	5%	1/10%
C151	1-163-007-11	CERAMIC CHIP 680PF	10%	50V		R122	1-216-077-00	METAL CHIP	15K	5%	1/10W
						R151	1-216-070-00	METAL CHIP	7. 5K	5%	1/10W
C152	1-163-007-11	CERAMIC CHIP 680PF	10%	50V	1	R152	1-216-070-00	METAL CHIP	7. 5K	5%	1/10W
C153		CERAMIC CHIP 0. 1uF		25V	Ι.	R153	1-216-070-00	METAL CHIP	7. 5K	01	1/10\
C154	1-164-336-11	CERAMIC CHIP 0. 33uF		- 25V	}						
C155		CERAMIC CHIP 680PF	10%	50V		R154	1-216-070-00	METAL CHIP	7. 5K	5%	1/10W
C156	1-163-007-11	CERAMIC CHIP 680PF	10%	50V		R155	1-216-070-00	METAL CHIP	7. 5K	5%	1/10W
				.,	1	R156	1-216-070-00	METAL CHIP	7. 5K	5%	1/10\
C157	1-163-037-11	CERAMIC CHIP 0.022uF	10%	25V		R157	1-216-085-00	METAL CHIP	33K	-5%	1/10\
C158		CERAMIC CHIP 0.022uF	10%	25V		R158	1-216-076-00	METAL CHIP	13K	5%	1/10₩
C159	1-163-023-00	CERAMIC CHIP 0.015uF	5%	50V	·						
C160	1-163-019-00	CERAMIC CHIP 0.0068uF	10%	50V		R159	1-216-085-00	METAL CHIP	33K	5%	1/10W
C181	1-163-038-00	CERAMIC CHIP 0. 1uF		25V		R160	1-216-081-00	METAL CHIP	22K	5% ;	1/10W
						R161	1-216-093-00	METAL CHIP	68K	5%	1/10W
		< CONNECTOR >				R162	1-216-085-00	METAL CHIP	33K	5%	1/10\
						R163	1-216-308-00	METAL CHIP	4.7	5%	1/10%
CN101	1-568-796-11	SOCKET, CONNECTOR 22P									
CN102	1-568-795-11	SOCKET, CONNECTOR 12P			i .	R181	1-216-021-00	METAL CHIP	68	5%	·1/10W
	3.5	PIN, CONNECTOR (SMALL TYPE)	5P			R182	1-216-021-00	METAL CHIP	- 68	5%	1/10W
		< IC >									
TC101	8-752-344-48	IC CXD2501Q									
	8-759-071-80								•		
	8-759-040-83										

# MAIN

								£#1/	<u> </u>
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description		Re	mark
		< CONNECTOR >		0372	8-729-141-30	TRANSISTOR	2SC3623A-LK	-	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			8-729-141-30		2SC3623A-LK		
	1-564-511-11	PLUG, CONNECTOR 8P		Q374	8-729-141-30		2SC3623A-LK		
		SOCKET, CONNECTOR 28P		Q375	8-729-231-55		2SC2878-AB		
		SOCKET, CONNECTOR 22P		Q376	8-729-231-55		2SC2878-AB		
* 011002	1-300.055 11	DOMES, CONNECTOR 221		0392	8-729-900-80		DTC114ES (M43)		
a CN991	1_564_708_11	PIN. CONNECTOR (SMALL TYPE) SI	D (MEA)	6027	0 123 300 00	THRESTOIC	DIGITARS (MAS)		
		PIN, CONNECTOR (SMALL TYPE) 51			·	< RESISTOR >			
		PIN, CONNECTOR 3P (AU BUS) (M43				< incorporation >			
* CMDST	1-202-201-11	FIR, COMPLETOR OF CHE BODY (MAN	"	P90A	1-249-425-11	CADRON	4. 7K 5%	1/4W	
		< DIODE >		R205	1-249-425-11		4. 7K 5%	1/4W	
		/ DYOPE >		R206	1-249-417-11		1K 5%	1/4₩	
DOOT	0.710.114.40	DIODE RD7. 5JSB2			1-249-417-11		1K 5%	1/4₩	
D200 ,	8-719-114-49	DIODE RD5, SESB2			1-249-423-11		3. 3K 5%	1/49	
	8-719-103-63			nzuo ·	1-549-457-11	OARDON	a. ar. aa	17/2#	
				R209	1-249-413-11	CADRON	470 5%	1/4W	
	8-719-987-63				1-249-429-11		10K 5%		(MEA)
	8-719-987-63							1/4W	
D381	8-719-987-63	DIODE 1N4148M (M43)		R211	1-249-410-11				(M54)
		(10)		R214	1-249-417-11		1K	1/4W	
		< IC >		K3U1	1-249-417-11	GARBUN	IN 5%	1/4W	
10000	0 ZEO COO 64	TO MEROND SC		Dann	4 040 447 44	CIDDON	III PA	4 / emt	
_	8-759-630-21				1-249-417-11		IN 5%	1/4W	
	8-759-945-58				1-249-421-11		2. 2K 5%	1/4₩	
	8-752-337-26			R304	1-249-417-11		IN III	1/4W	
IC302	8-752-342-65	IC CXD2560M	j	R306	1-249-413-11		470 5%	1/49	
				R309	1-249-405-11	CARBON	100 5%	1/4₩	
	8-752-349-01								
	8-759-503-91				1-249-423-11		3, 3K	1/4W	
	8-759-945-58			R312	1-249-429-11		10K 5%	1/4₩	
IC307	8-759-945-58	IC RC4558P		R313	1-249-423-11		3. 3K 5%	1/4₩	
				R314	1-249-429-11		10K 5%	1/4W	
		< JACK >		R315	1-249-417-11	CARBON	1K 5%	1/4W	
	4 500 440 11	TAGE DIN ON A THE OFFEN AGAIN		Batc	1 040 417 11	CIEDON	10	1 / 407	
J381		JACK, PIN 2P (LINE OUT) (M43)		R316	1-249-417-11		1K	1/4W	
+ J381	1-569-443-11	JACK, PIN 4P (LINE OUT) (M54)		R317	1-249-419-11		1.5K 5%	1/4₩	
		/ 4011		R318	1-249-441-11		100K III	1/4₩	
		< COIL >			1-247-903-00		1M 5%	1/4W	
. 504	4 100 100 50	Think armon		R320	1-249-417-11	CAMBUN	1K 5%	1/49	
L301	1-408-403-00			2004	4 040 417 41	CARRON	. 127	4 /400	
L321	1-408-403-00	INDUCTOR 3. 3uH			1-249-417-11		1K M	1/4W	
		/ SEDABIGITORS >			1-249-417-11			1/4₩	
		< TRANSISTOR >		R323	1-249-417-11		.1K 5%	1/4W	
		WALLES		R324	1-249-417-11		1K 5%	1/4W	
•	8-729-140-96	· ·		R325	1-249-417-11	CARBON	1K 5%	1/4₩	:
Q203	8-729-141-83					_:			
Q204	8-729-900-65			R326	1-249-417-11		1K 5%	1/4₩	
<b>Q205</b>	8-729-900-89	TRANSISTOR DTC144ES		R327	1-247-903-00		MM 5%	1/4W	
				R328	1-247-895-00		470K 5%		
<b>Q</b> 206	8-729-900-89			R330	1-249-417-11		1K 5%		(M43)
0207	8-729-230-45		ļ	R343	1-249-441-11	CARBON	100K 5%	1/48	
Q208	8-729-141-83	TRANS 1STOR 2SB1094-LK							
Q209	8-729-281-52	TRANSISTOR 2SC1815-Y (M54)		R344	1-249-441-11		100K 5%	1/47	
Q341	8-729-900-65	TRANSISTOR DTA144ES		R345	1-249-425-11	CARBON	4. 7K 5%	1/4₩	
			·	R346	1-249-425-11	CARBON	4.7K 5%	1/4₩	
Q342	8-729-900-65	TRANSISTOR DTA144ES		R347	1-249-441-11	CARBON	100K 5% -	1/4W	
Q343	8-729-900-65	TRANSISTOR DTA144ES		R351	1-249-436-11	CARBON	39K 5%	1/4W	
Q344	8-729-900-89	TRANSISTOR DTC144ES							
Q371	8-729-141-30	TRANS ISTOR 2SC3623A-LK							

## MAIN MOTOR VOL

Ref. No.	Part No.	Description			Re	mark	Ref. No.	Part No.	Description Remark
R352	1-249-436-11	CARBON	39K	5%	1/4\	_			< VIBRATOR >
R353	1-249-436-11		39K	5%	1/4₩				
R354	1-249-436-11		39K		1/4W		X327	1-579-314-11	VIBRATOR, CRYSTAL (22.5792MHz)
			39K		1/4W		NOLI	11, 110 010 1	VIDIGITOR, VILITIDE (ED. 0752mile)
R355	1-249-436-11						****		
R356	1-249-436-11	CARBON	39K	5%	1/4W		<b>华</b> 森森 · · · · · · · · · · · · · · · · · ·	·····································	宋·南安帝家沙南水水还的南水水后两水水南水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水
R357	1-249-436-11	CARBON	39K	5%	1/4W		*	A-4849-107-A	MOTOR VOL BOARD, COMPLETE (M54)
R358	1-249-436-11	CARBON	39K	5%	1/4₩				*************
D261	1-249-431-11	CADDOM	15K	5%	1/4W	(M54)	*		HOLDER (LED) (M54)
R361					1/4W	' '	*	4 045 000 01	INCOME (DOM) AND AND AND AND AND AND AND AND AND AND
R361	1-249-432-11	CARDUN	18K	3%	1/4#				/ CADACITOD \
			4.537	En.	a (anti	S Area			< CAPACITOR >
	1-249-431-11		15K		1/4W			- 404 440 00	
R362	1-249-432-11	CARBON	18K	5%	1/4₩	(M43)		1-124-443-00	
							C452	1-124-443-90	ELECT 190uF 20% 10V(M54)
R363	1-249-431-11	CARBON	15K	5%	1/49	(M54)	C471	1-124-443-00	ELECT 100uF 20% 10V (MS4)
R363	1-249-432-11	CARBON	18K	5%	1/4\	(M43)	C472	1-124-768-11	ELECT 4. 7aF 20% 50V (M54)
	:"				,		C473	1-164-159-11	
R364	1-249-431-11	CARBON	15K	5%	1/4₩	(M54)			
R364	1-249-432-11	CARBON	18K	5%	1/47	()(43)			< CONNECTOR >
R365	1-249-438-11	CADRON	56K	- EW	1/4W		* CN451	1-564-708-11	PIN. CONNECTOR (SMALL TYPE) 6P (MS4)
									PIN, CONNECTOR (SMALL TYPE) 5P (M54)
R366	1-249-438-11			- 1	1/47				
R367	1-249-438-11		56K		1/49		. UN4/Z	1-200-408-11	CONNECTOR 3P, MALE (M54)
R368	1-249-438-11	CARBON			1/4₩				
R369	1-249-419-11	CARBON	1. 5K	. 5%	1/4₩				< DIODE >
R370	1-249-419-11	CARBON	1. 5K	5%	1/4W		D471	8-719-970-49	DIODE BR4361F
	1-249-419-11		1, 5K		1/4W				LINE OUT PHONE LEVEL) (M54)
	1-249-419-11		1. 5K		1/4W				A A STATE OF THE TANK AND TANK
									< IC >
	1-247-887-00		220K		1/4W				(10)
R374	1-247-887-00	CARBON	220K	. 3%	1/4W		10/51	8-750-021-RQ	IC RC4556S (M54)
Bone	4 040 400 11	CARRON	220	EW .	1 ///4				IC BA6208 (M54)
	1-249-409-11		220		1/4W		10471	0-108-802-00	10 080200 (004)
R376	1-249-409-11		220		1/4W			,	4 DEGGERAD >
R377	1-249-409-11		220		1/4W				< RESISTOR >
R378	1-249-409-11	CARBON	220		1/4₩				
R379	1-249-425-11	CARBON	4.7K	5%	1/4W		R451	1-249-435-11	
							R452	1-249-435-11	CARBON 33K 5% 1/4W (M54)
R380 .	1-249-425-11	CARBON	4.7K	5%	1/4₩		R453	1-249-432-11	CARBON 18K 5% - 1/4W (M54)
R381	1-249-425-11		4.7K		1/4₩	1	R454	1-249-432-11	
R382	1-249-425-11		4. 7K		1/49		R455	1-249-422-11	
					1/4\		11100	1 040 100 11	2. 11 50 1/ 11 (1101/
Ř383	1-249-413-11		470				DACC	1 040 400-11	CADDON 9 TH EW 1/AW /MEA
R384	1-249-413-11	CARBON	470	5%	1/4W		R456	1-249-422-11	
							R457	1-249-429-11	
R385	1-249-393-11		10	-5%	1/4\;	·	R458	1-249-429-11	
R386	1-249-393-11	CARBON	10	5%	1/4W		R461	1-249-399-11	CARBON 33 5% 1/4W (M54)
R388	1-249-393-11	CARBON	10	5%	1/4W	(M43)	8462	1-249-399-11	CARBON 33 5% 1/4W (M54)
R389	1-249-413-11		470			(M54)			
R390	1-249-413-11		470	5%		(M54)	R471	1-249-411-11	
11030	T PAG AIR II	CHUVII		0.00	77 214	freez wh	R472	1-249-417-11	
DOGE	1 040 405 44	CARRON	107	SW.	1 /40	(MAS)			
R395	1-249-429-11		10K	5%		(M43)	R473	1-249-417-11	CARBON 1K 5% 1/4W (M54)
R396	1-247-848-11		5. 1K		1/4W				A CHARLES DECISION
R397	1-247-848-11	CARBON	5. 1K		1/4W				< VARIABLE RESISTOR >
R398	1-247-848-11	CARBON	5. 1K	- 5%	1/4W				
R399	1-247-848-11	CARBON	5. 1K	5%	1/4W	· [	RV451	1-241-810-11	RES, VAR, CARBON 10K/10K
									(LINE OUT PHONE LEVEL) (M54)

								-   B[	)   DISF	P   HP
		<b>.</b>				t D.C.N.	D. 4 N.	D 1.41		
Ref.:No.	Part No.	Description		Ke	mark 	Ket. No.	Part. No.	Description	ı. ·	- Remark
		< SWITCH >						< SWITCH >		
	-	٠.								
\$101	1-572-085-11	SWITCH, LEAF (L	imit sw)	•		S401	1-554-303-21	SWITCH, TAC	TILE (CONTINUE)	* a * a * a * a * a * a * a * a * a * a
******	****	*****	******	******	****	S402	1-554-303-21	SWITCH, TAC	TILE (REPEAT)	
*			· · · ·			S403	1-554-303-21			
*	A-4649-104-A	DISP BOARD, COM	PLETE (M5/	4)		S404	1-554-303-21	SWITCH, TAC	TILE (	
• 1		DISP BOARD, COM				S405	1-554-303-21	SWITCH, TAC	TILE (SHUFFLE)	
		******	******	**		0400	1 554 202 01	CHITCH TAC	THE (FARED)	\$ .
		Z CADACITOD \			•	\$406	1-554-303-21			
	•	< CAPACITOR >				S407	1-554-303-21			
		APPAHTA	0.42		FOD	S408	1-554-303-21			
	1-164-159-11		O, 1uF	aner	50V	\$409			TILE (PROGRAM)	
	1-126-154-11		47uF	20%	6. 3V	S410	1-554-303-21	SWITCH, IAC	TILE (TIME)	
	1-161-494-00		0. 022uF		25V		4 554 000 04	ONITMOSE TAG	marra /	
C405	1-164-159-11	CERAMIC	0. 1uF		507	1	1-554-303-21		-	
1. 1						S412			TILE (OPEN/CLOSE	()
		< CONNECTOR >				S413	1-554-303-21			
						S414	1-554-303-21	SWITCH, TAC	TILE (	
- CN401	1-535-987-11	JAMPER, FILM (W	ITH TERMIN	NAL):		5415	1-554-303-21	SWITCH, TAC	TILE (EDIT)	Ch.
		( BY 6 BT )					4 554 000 04	OMETING TAO	marin (marin com)	
		< D10DE >				1		-	TILE (TIME SET)	13.
						1			TILE (PEAK SERCH	
D401	8-719-987-63					1 .	and the second second		TILE (MUSIC SCAN	0
D402	8-719-987-63					S419	1-554-303-21			
D403	8-719-987-63	D10DE 1N4148M	i			S420	1-554-303-21	SWITCH, TAC	TILE (6)	
D404	8-719-987-63	DIODE 1N4148M	i							
D405	8-719-987-63	DIODE 1N4148M	i			S421	1-554-303-21			
97						S423	1-554-303-21	SWITCH, TAC	TILE (2)	
D406	8-719-987-63	DIODE 1N4148M	1			S424	1-554-303-21	SWITCH, TAC	TILE (7)	
D407	8-719-987-63	D10DE 1N4148M	1			S425	1-554-303-21	SWITCH; TAC	TILE (12)	
D408	8-719-987-63	DIODÉ IN4148M	1			S427	1-554-303-21	SWITCH, TAC	TILE (3)	
D409	8-719-987-63	DIODE 1N4148M	ł							
D410	8-719-987-63	DIODE 1N4148M	l			S428	1-554-303-21	SWITCH, TAC	TILE (8)	
						S431	1-554-303-21	SWITCH, TAC	TILE (4)	
D411	8-719-987-63	DIODE 1N4148M	i			S432	1-554-303-21	SWITCH, TAC	TILE (9)	44 4
D412	8-719-121-24	DIODE RD9, 1ES	L	•		S435	1-554-303-21	SWITCH, TAC	TILE (5)	
					•	S436	1-554-303-21	SWITCH, TAC	TILE (10)	
		< FLUORESCENT I	NDICATOR :	>.						-
						S439	1-554-303-21	SWITCH, TAC	TILE (>12)	
FLD40	1 1-519-681-11	INDICATOR TUBE,	FLUORESC	ENT		S440	1-554-303-21	SWITCH, TAC	TILE (CHECK)	
						S441	1-554-303-21	SWITCH, TAC	TILE (CLEAR)	
		< IC >				S442	1-554-303-21	SWITCH, TAC	TILE (A. SPACE/A.	CUE)
	4									
IC401	8-759-061-40	IC uPD75216AC	W-073 (M5/	4)				< VIBRATOR	>.	
IC401	8-759-070-44	IC uPD75216AC	W-C93 (M4	3)						
1C402	8-741-100-48	IC SBX1610-59	(M54)			X401	1-577-358-21	VIBRATOR, C	ERAMIC (4MHz)	
		< RESISTOR >				****	*****	******	**********	++++++
D401 :	1_9/0_/95_11	CAPRON	33K E0.	1 //9			1-642-886-21	HD BOARD - O	(5 <i>4</i> )	
	1-249-435-11		33K 5%				1050_7501	######################################	•	•
	1-249-435-11		33K M	·		.]		**********	art.	
-	1-249-435-11		33K 5%					/ 04B401B0B		
R404	1-249-435-11	CARBON	33K 5%	1/4₩				< CAPACITOR	(2)	
PADE	1 040 495 44	CYDDOM	oav ce	1 //9			1-162-294-31	CEDAMIC	0 001.5	50V (M54)
R405	1-249-435-11		33K 5%							
. R406	1-249-425-11		4. 7K 5%		I .		1-162-294-31			
R497	1-249-425-11		4. 7K 5%			. 1483	1-164-159-11	OLRAMIC	0. 1uF	50V (M54)
R408	1-249-439-11	UARBUN	68K 5%	1/41		1				

HP	LOAD	ING	M	AIN
	Part No.	Description		
		< JACK >	-	
J481	1-568-519-41	JACK, LARGE	TYPE	(PHONES) (M54
		< RESISTOR :	>	

R481 1-249-402-11 CARBON 56 5% 1/4W(M54 R482 1-249-402-11 CARBON 56 5% 1/4W(M54

\*

Remark

\* 1-632-202-11 LOADING BOARD

< CONNECTOR >

\* CM301 1-564-707-11 PIN, CONNECTOR (SMALL TYPE) 5P

< SWITCH >

\$271 1-572-086-11 SWITCH, LEAF (OUT SW) \$272 1-572-086-11 SWITCH, LEAF (IN SW)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

- \* A-4649-105-A MAIN BOARD, COMPLETE (M54)
  \* A-4649-111-A MAIN BOARD, COMPLETE (M43)
- 4-902-345-01 HEAT SINK (EXCEPT M54:UK)

  4-941-237-01 HEAT SINK (M54:UK)

#### < CAPACITOR >

C205	1-126-163-11	ELECT	-	4. 7uF	20%	50V
C206	1-126-059-11	ELECT		10uF	20%	50V
C207	1-126-059-11	ELECT		10uF	20%	50¥
C208	1-124-997-11	ELECT		470uF	20%	107
C209	1-124-997-11	ELECT		470uF	20%	10V
				•		
C210	1-126-024-11	ELECT		220uF	20%	167
C211	1-124-997-11	ELECT		470uF	20%	10V
C212	1-164-159-11	CERAMIC		0. 1uF		50V
€213	1-126-012-11	ELECT		470uF	20%	16V
€214	1-126-012-11	ELECT		470uF	20%	16V
C301	1-126-022-11	ELECT		47uF	20%	16V
C302	1-126-301-11	ELECT		1uF	20%	50V
C305	1-126-022-11	ELECT		47uF	20%	16V
C308	1-164-159-11	CERAMIC		0. 1uF		50V
C307	1-164-159-11	CERAMIC		0. 1uF		50Y
C308	1-164-159-11	CERAMIC		0. 1uF		50V
C311	1-130-491-00	MYLAR		0. 047uF	5%	50V
C312	1-161-374-11	CERAMIC		0. 0015uF	20%	· 50¥
C313	1-161-494-00	CERAMIC		0. 022uF		25V
C314	1-162-306-11	CERAMIC		0. 01uF	20%	16V

Ref. No.	Part No.	Description		Re	mark
C315	1-126-300-11	ELECT:	0. 47uF	20%	507
C317	1-164-159-11		O. luF		5DV
C318	1-164-159-11	CERAMIC	0. 1uF	. 50	V (M43)
C319	1-162-282-31	CERAMIC	100PF	10%	50V
C320	1-130-483-00	MYLAR	0. 01uF	5%	50V
C321	1-162-208-31	CERAMIC	24PF	5%	50Y
C322	1-124-994-11	ELECT	100vF	20%	107
C324	1-164-159-11	CERAMIC	0. 1uF		50V
C325	1-162-205-31	CERAMIC	18PF	5%	50V
C326	1-162-205-31	CERAMIC	18PF	5%	50V
C327	1-164-159-11		0. 1uF		50V
C328	1-126-024-11		220uF	20%	*
C329	1-126-024-11		220uF	20%	16V
C330	1-162-294-31		0. 001uF	10%	50V
C331	1-164-159-11	CERAMIC.	0. tuF		50V
C332	1-164-159-11	CERAMIC:	0. 1uF		50V
C333	1-164-159-11	-	0. 1uF		50V
C335	1-164-159-11		0. 1uF		50V
C351			47uF	20%	16V
C352	1-164-159-11		0. 1eF	4074	50V
0002	1 103 100 11	ODINEMILY			
C353	1-125-022-11	ELECT.	47uF	20%	18V
C354	1-164-159-11	CERAMIC	0. 1uF		507
C355	1-126-022-11	ELECT	47uF	20%	16V
C356	1-164-159-11	CERAMIC	0. tuF		50V
C357	1-124-994-11	ELECT	100uF - 20%	107	(M43)
C357	1-124-997-11	ET ECT.	470uF 209	107	(MS4)
C358	1-124-994-11		100uF 209		(M43)
	1-124-997-11		470uF 20%		(M54)
C361	1-162-280-31		82PF	10%	50V
C362	1-162-280-31		82PF	10%	5DV
6402	1-102 200 31	OLIUMIO	0211	10/4	
C363	1-162-213-31	CERAMIC	39PF	5%	50V
C364	1-162-213-31	CERAMIC	39PF	5%	507
C365	1-162-213-31	CERAMIC	39PF	5%	50V
C366	1-162-213-31		39PF	5%	50 <b>V</b>
C367	1-161-494-00	CERAMIC	0. 022uF		25V
C368	1-161-494-00	CERANIC	0. 022uF		25V
C371	1-106-359-00		4700PF	5%	2007
C372			4700PF	5%	200V
C373	1-130-472-00		0. 0012uF	5%	50V
C374	1-130-472-00		0. 0012uF	5%	50Y
4014	1 100 112 00	, minime	Us UVINUS	0.4	
C377	1-126-022-11		47uF	20%	16V
C378			47uf	20%	16V
C379	1-106-347-00		1500PF	5%	200V
C380	1-106-347-00		1500PF	5%	200V ·
C392	1-164-159-11	CERAMIC	0. 1uF	5	OV (M43)
C393	1-164-159-11	CERAMIC	C. 1uF	5	OV (M43)
C394	1-124-994-11				OV (M43)
V037	7 F8 X 10.1 T1	LULUE	20000 20		

Remark

P.	SW	POWER

D-# M-	Part No.	Decemention		Ros	nark
Ref. No.	Part No.	Description		-	
*	1-642-887-21	P. SW BOARD			
		< switch >			
S491	1-554-118-00	SWITCH, PUSH (1	L KEY) (POWER	R)	
*******	****	*****	********	****	****
*	1-642-883-21	POWER BOARD			
		< CAPACITOR >			
C201	1-124-572-11	ELECT	100uF	20%	63V
C202	1-126-059-11	ELECT	10uF	20%	
	1-124-556-11		2200uF	20%	
	1-126-937-11		4700uF	20%	16V
C221	1-164-159-11	CERAMIC.	0. 1uF		50V
		< CONNECTOR >			•
+ CN201	1-564-511-11	L PLUG, CONNECTO	R 8P		
• CN203	1-580-230-11	L PIN, CONNECTOR	(PC BOARD)	3P	
		< DIODE >			
D201	8-719-200-02	2 DIODE 10E2 (M	43: E, Saudi .	Arabia)	
		2 DIODE 11ES2			
		(EXCEPT	M54/M43: E, S	audi Ara	ıbia)
D202	8-719-110-0	3 DIODE RD7. SES	-В2		
กรกร	9_710_20\(\)-\(\)	2 DIODE 10E2 (M	(43: E. Saudi	Arabia)	
	8-719-200-8				
5200	2 . 1 2 200 20		M54/M43:E, S	audi Ara	abia)
D2OA	8-719-200-0	2 DIODE 10E2 (M	(43: E, Saudi	Arabia)	
		2 DIODE 11ES2			
		(EXCEPT	M54/M43:E, S	audi Ara	abia)
D205		2 DIODE 10E2 ()	143: E, Saudi	Arabia)	
D205		Z DIODE 11ES2			
		(EXCEPT	M54/M43:E, S	Baudí Ara	abia)
D206	8-719-200-0	2 DIODE 10E2 (	M43: E, Saudi	Arabia)	
		2 DIODE 11ES2			
		(EXCEPT	M54/M43:E, S	Saudi Ar	abia)
		< IC >			
IC201	8-759-633-4	12 IC M5293L			
		< TRANSISTOR	>		

Q201 8-729-119-76 TRANSISTOR 2SA1175-HFE

	< RESISTOR >
	, AAN
	1-249-435-11 CARBON 33K 5% 1/4W
	1-249-438-11 CARBON 56K 5% 1/4W
R203	1-249-429-11 CARBON 10K 5% 1/4W
	< SHITCH >
<u></u> \$201	1-571-722-11 SWITCH, VOLTAGE SELECTION
	(E, Saudi Arabia)
*****	************************
	MISCELLANEOUS
	申请事命申申请者告诉申申
<b>A</b> 23	1-558-946-21 CORD, POWER (M54:UK)
	1-574-358-31 CORD, POWER (WITH CONNECTOR) (Australian
A23	1-575-651-21 CORD, POWER (AEP, Italian, Saudi Arabia)
A-23	1-575-653-21 CORD. POWER (E)
<u></u> <b>A</b> 23	1-590-379-11 CORD, POWER (M43:UK)
28	1-575-160-11 WIRE, FLAT TYPE (22 CORE)
<u></u> 432	1-569-007-11 ADAPTER, CONVERSION 2P (E)
<b>1</b> 32	1-569-008-11 ADAPTER, CONVERSION 2P (Saudi Arabia)
* 110	1-452-538-11 MAGNET
156	1-402-030-11 WARNE, FLAT TYPE (12 CORE)
Win	0-040-144-11 DEVICE, OFFICE NOS 240A
D471	8-719-970-49 DIODE BR4361F (M54)
M101	X-4917-523-3 BASE (OUTSERT) ASSY
M102	X-4917-504-1 MOTOR ASSY
	A-4604-363-A MOTOR (L) ASSY
	·
<b>∄</b> T901	1-449-922-11 TRANSFORMER, POWER (EXCEPT E Saudi Arabia)

Description

Ref. No. Part No.

Note: The components identified by mark \( \bar{\Lambda} \) or dotted line with mark \( \bar{\Lambda} \) are critical for safety. Replace only with part number specified.

Ref. No. Part No.

Description

Remark

#### ACCESSORIES & PACKING MATERIALS \*\*\*\*\*\*\*\*\*\*

1-465-867-11 REMOTE COMMANDER (RM-D597) (M54)

1-558-271-11 CORD, CONNECTION (MADE IN FRANCE) 1-559-533-11 CORD, CONNECTION (MADE IN JAPAN)

2-181-754-01 COVER, BATTERY (M54)

3-754-665-11 MANUAL, INSTRUCTION (English/French Spanish/Portuguese) (M54:AEP, E, UK)

3-754-865-41 MANUAL, INSTRUCTION (Dutch/German Italian/Swedish) (M54:AEP)

4-922-998-01 CUSHION (MADE IN JAPAN)

4-927-355-03 CUSHION (MADE IN FRANCE)

4-948-882-31 INDIVIDUAL CARTON

(MADE IN FRANCE M43: AEP, Italian, UK)

4-948-882-41 INDIVIDUAL CARTON

(MADE IN FRANCE M54: AEP, UK)

4-949-971-21 INDIVIDUAL CARTON

(MADE IN JAPAN M43: AEP, Australian)

4-949-971-41 INDIVIDUAL CARTON

(MADE IN JAPAN M54:E, AEP)

### HARDWARE LIST

- 17-682-548-09 SCREW +BVTT 3X8 (S)
- 27-682-547-09 SCREW +B 3X6
- 37-682-547-04 SCREW +BVTT 3X6 (S) #3
- 47-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S
- 57-621-255-15 SCREW +P 2X3 #5
- #6 67-685-134-19 SCREW +BTP 2.6X8 TYPE2 N-S
- 77-621-775-10 SCREW +B 2.6X4

# TC-D509

# SERVICE MANUAL

TC-D509 is deck section in LBT-A57CD/A57CDM/D509CD.

AEP Model UK Model E Model Australian Model

TC-D509 is based on model TC-D507.

As only difference parts of TC-D507 in this service manual.

Refer to TC-D507 service manual previously issued for the other information.

#### **DIFFERENCE PARTS LIST**

		TC-D507 service ma	TC-D509	
Page	ge Ref. No. Description Part No. (Destination)		Part No.	
19	1	LID (A) ASSY, CASSETTE	X-3364-710-1 (except for IT) X-3364-711-1 (IT)	X-3364-710-1
	2	LID (B) ASSY, CASSETTE	X-3364-712-1 (except for IT) X-3364-713-1 (IT)	X-3366-399-1
	5	CASE	*4-939-803-31 (except for IT) *4-939-803-71 (IT)	*4-939-803-31
	6	PANEL, BACK	*3-377-136-11 (except for G) *3-377-136-21 (G)	*3-387-099-01 (except for G) *3-387-099-12 (G)
20	51	PANEL ASSY, FRONT	X-3364-706-1 (except for IT) X-3364-707-1 (IT)	X-3364-706-1
	56	KNOB (SLIDE)	*3-377-110-01 (except for IT) *3-377-110-11 (IT)	*3-377-110-01

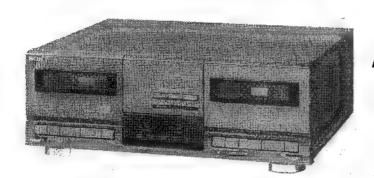
 Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



English 93C0462-1 Printed in Japan © 1993. 3

# TC-D507

# **SERVICE MANUAL**



UK Model E Model Australian Model East European Model

AEP Model

This set is the deck section in LBT-D507/D507CD/D507CDM.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol 🔯 are trademarks of Dolby Laboratories Licensing Corporation.

Model Name Using Similar Mechanism	TC-H1600
Tape Transport	DECK A: TCM-190RA12C
Mechanism Type	DECK B: TCM-190RB22C

#### **SPECIFICATIONS**

Recording system Frequency response 4-track 2-channel stereo
DOLBY NR OFF
With Type IV cassette
(Sony METAL-ES)
30 Hz to 15 kHz (±3 dB)
With Type II cassette (Sony UX-S)
40 Hz to 14 kHz (±3 dB)
With Type I cassette (Sony HF-S)

40 Hz to 14 kHz (±3 dB) ±0.2 % (DIN)

Wow and flutter  $\pm 0.2$  % (DIN) Weight Approx. 3.4 kg

Dimensions Approx.  $355 \times 131 \times 304 \text{ mm}$  (w/h/d, including projections)

Design and specifications are subject to change without notice.

#### Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.



CASSETTE DECK
SONY.

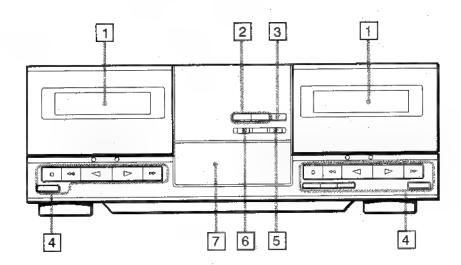
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# SECTION 1 GENERAL

Location of Controls

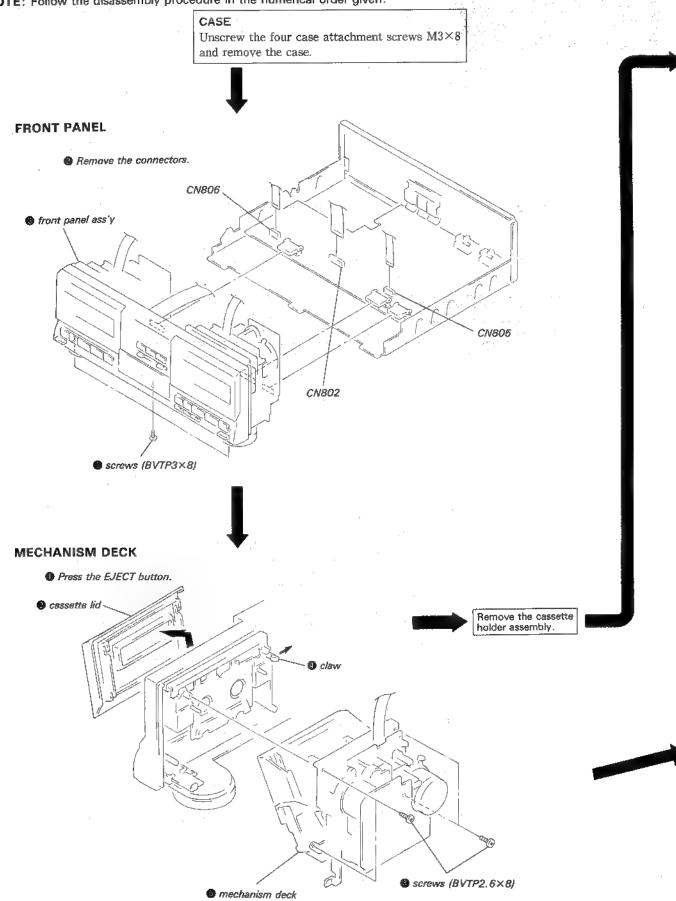
This section is extracted from instruction manual.



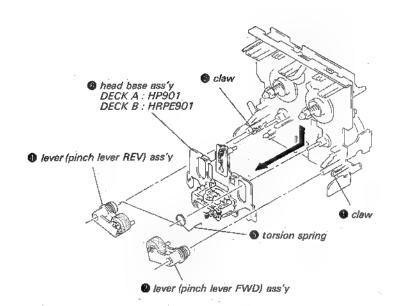
- Cassette holders
- 2 SYNCHRO DUBBING buttons (44)
- 3 CD SYNCHRO button (48)
- 4 Tape operation buttons
  - Leftward fast winding/AMS\*,
  - ►► Rightward fast winding/AMS\*,
  - ► Forward play, ◀ Reverse play,
  - Stop, 🃤 Eject, 💵 Pause (deck 🗉 only),
  - O Record muting (deck B only),
  - Record (deck B only)
- 5 DOLBY NR (noise reduction) switch (36)
- © DIRECTION MODE selector (32, 36, 44, 48)
- 7 Display window
- \* AMS is the abbreviation of Automatic Music Sensor.

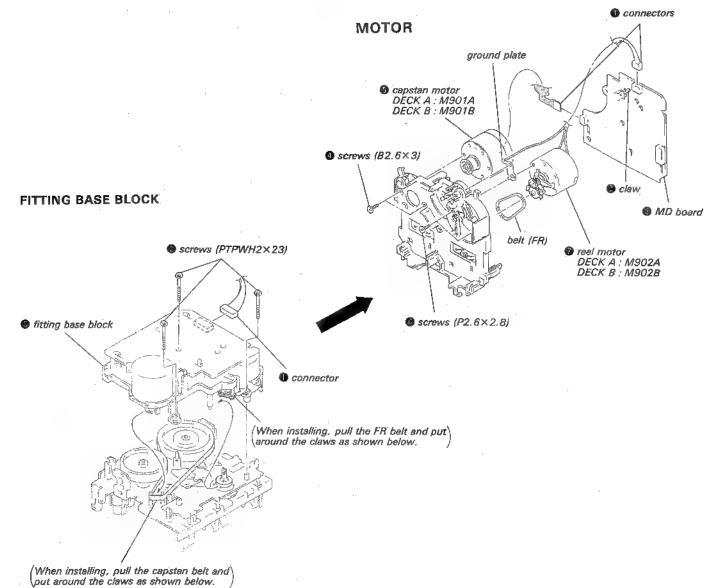
# SECTION 2 DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.



#### **HEAD**





# SECTION 3 MECHANICAL ADJUSTMENTS

# SECTION 4 ELECTRICAL ADJUSTMENTS

#### **PRECAUTION**

 Clean the following parts with a denatured-alcoholmoistened swab;

record/playback/erase head

pinch roller

rubber belts

capstan

idler

Demagnetize the record/playback head with a head demagnetizer.

(Head demagnetizer do not approach for the erase head.)

- 3. Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed in the rated power supply voltage unless otherwise noted.

#### Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	35 to 60g · cm (0.49 to 0.83 oz · inch)
FWD Back tension CQ-102C		2 to 6g cm (0.03 to 0.08 oz inch)
REV	CQ-102RC	35 to 60g · cm (0.49 to 0.83 oz · inch)
REV Back tension CQ-102RC		2 to 6g·cm (0.03 to 0.08 oz·inch)
FF. REW	CQ-201B	70 to 110g · cm (0.98 to 1.52 oz · inch)

Note: The adjustment should be performed in the order given in the service manual. As a rule, adjustment about playback should be performed before adjustment about recording.

The adjustments should be performed for both L-CH and R-CH.

#### Test Mode

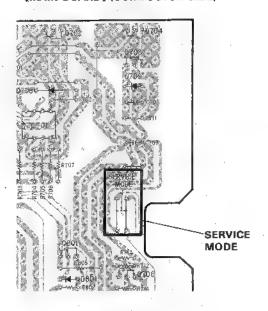
again.

The Test mode is acrivated by shorting Test Poing Service mode (IC801 64 pin changes over to "L") with the POWER switch in OFF position, then turning on the POWER switch.

In this mode, the following functions operate:

- Source monitor
   Line mute is cancelled during recording.
- High speed playback
   High speed playback is executed when the HIGH SPEED
   (DUBBING) button is jpressed during playback. Normal
   speed playback is restored when the button is pressed
- Record memory
   The tape counter is reset to "0" at the record start point.
   After adjustment, open the Service mode to cancel the Test mode.

#### [MAIN BOARD] (CONDUCTOR SIDE)

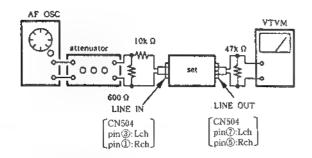


 Switches and controls should be set as follows unless otherwise specified.

#### • Standard Record:

Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

#### - Record Mode-



#### Standard Input Level

input terminal	LINE IN
source impedance	10kΩ
input level	0.25V (-10dB)

#### Standard Output Level

output terminal	LINE OUT
load impedance	47kΩ
output level	0.44V (-5dB)

#### Test tape

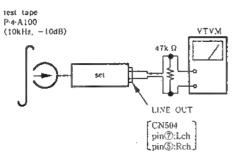
Туре	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

#### Record/Playback Head Azimuth Adjustment

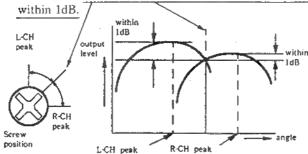
#### DECK A DECK B

#### Procedure:

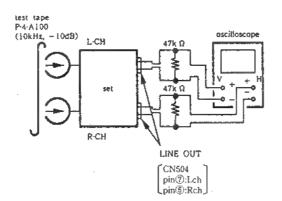
1. Mode: FWD playback

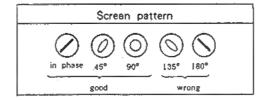


Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together



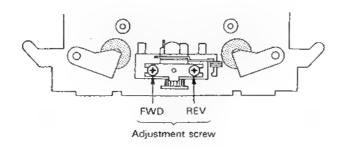
3. Phase Check Mode: płayback





- 4. Set in the REV mode and repeat the step 1-3.
- After the adjustment, lock the screws with locking compound.

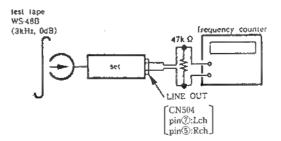
Adjustment Location: Record/playback head



#### Tape Speed Adjustment DECK A DECK B

#### Procedure:

Mode: playback



Perform high speed adjustment before normal speed adjustment.

#### (High speed adjustment)

- Continue pressing the SYNCHRO DUBBING HIGH SPEED switch.
- Check that frequency counter reading is within the standard value 6,000±60Hz.
- 3. If out of the standard, adjust each RV72 so that the frequency counter reading satisfies  $6,000\pm60$ Hz on both A and B decks.
- 4. Change over to Rev playback status, and repeat the above steps 1 to 3.

#### (Normal speed adjustment)

- Continue pressing the SYNCHRO DUBBING NORM SPEED switch.
- 2. Check that the frequency counter reading is within the standard value  $3,000 \pm 30 \text{Hz}$ .
- 3. If out of the standard, adjust each RV71 so that the frequency counter reading satisfies 3,000 ± 30Hz on both A
- 4. Change over to REV playback status, and repeat the above steps 1 to 3.

Frequency difference between the beginning and the end of the tape should be within 3%.

Frequency difference between deck A and deck B the beginning of the tape should be within 1.0%.

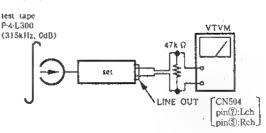
#### Adjustment Location:

MD-A, MD-B board

# Playback Level Adjustment DECK A DECK B

#### Procedure:

Mode: playback



Adjust RV11 (L-CH), RV21 (R-CH) so that the reading on VTVM meets the adjustment limits below.

#### Adjustment Limits:

LINE OUT level:  $-7.7 \pm 0.5 dB (0.30 - 0.33 V)$ 

Level difference between channels: less than 0.5dB Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times:

Adjustment Location: MD-A, MD-B board

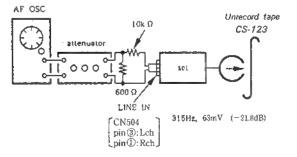
#### Record Bias Adjustment DECK B

#### etting ·

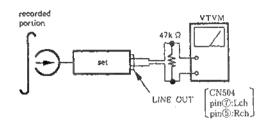
REC LEVEL control: Standard Record (See page 7).

#### Procedure :

1. Mode: record



### 2. Mode : playback



Playback the signal recorded in step 1.

Confirm that the 10kHz playback output is  $0\pm0.5\text{dB}$  relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

Adjustment Location : MD-B board

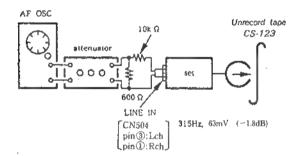
### Record Level Adjustment DECK B

Setting:

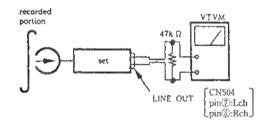
REC LEVEL control: Standard Record (See page 7).

#### Procedure:

1. Mode: record



2. Mode: playback

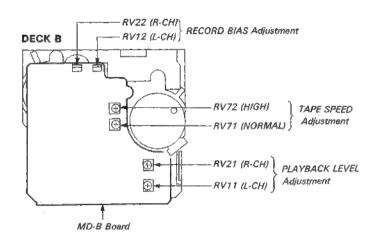


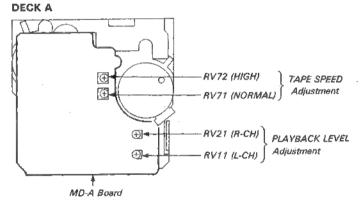
 Playback the signal recorded in step 1.
 Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat the step 1-2.

Adjustment Limits: -3.8dB±0.5dB (0.47-0.53V)

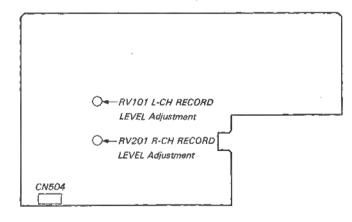
Adjustment Location: MAIN board (component side)

#### - Adjustment Parts Location Diagrams+



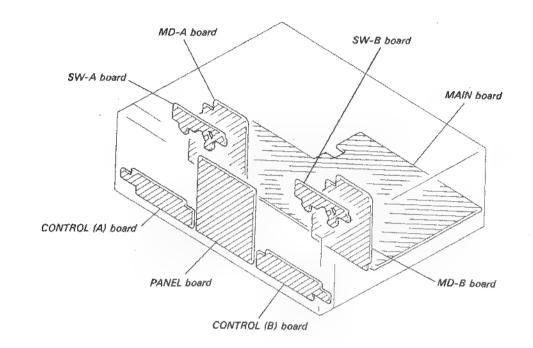


#### MAIN BOARD (COMPONENT SIDE)

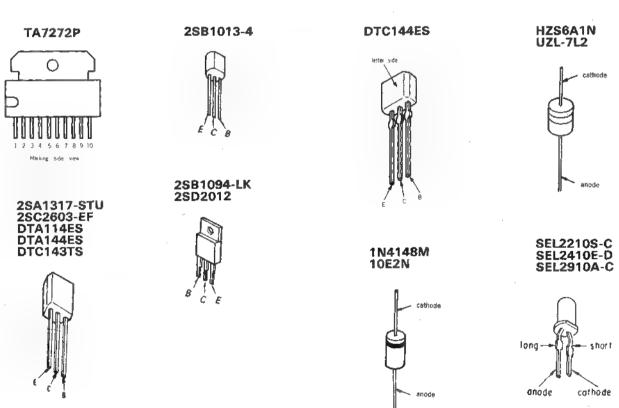


# SECTION 5 DIAGRAMS

#### 5-1. CIRCUIT BOARDS LOCATION



#### 5-2. SEMICONDUCTOR LEAD LAYOUTS



#### 5-3. PRINTED WIRING BOARDS

#### Semiconductor Location

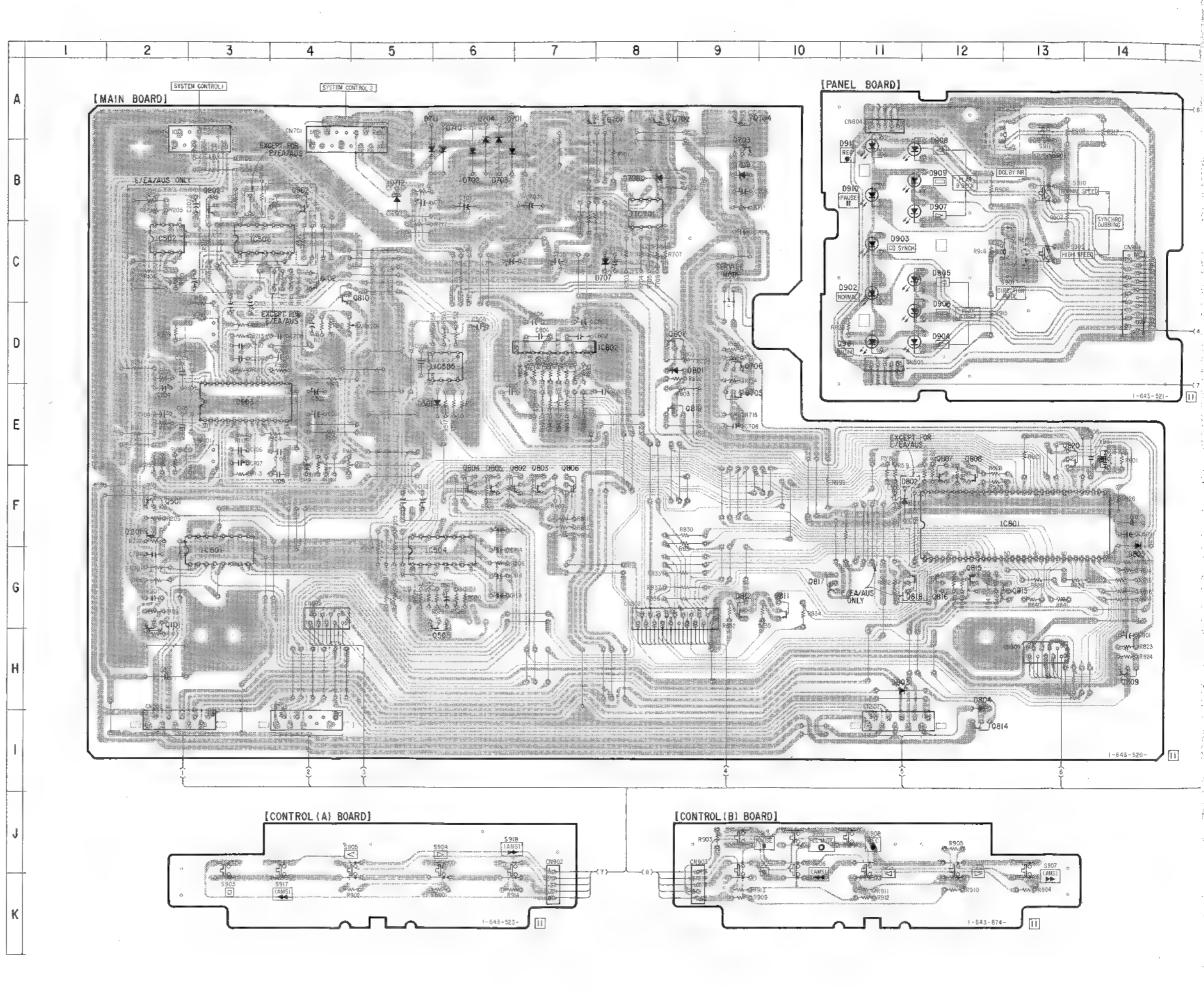
	Ref. No.	Location	Ref. No.	Location
	D31	H-24	Q51	G-25
	D501	E-6	Q52	G-25
	D701	B-6	Q53	G-25
	D702	B-6	Q71(MD-A)	H-20
	D703	B-6	Q71(MD-B)	H-28
ĺ	D704	B-6	Q101	G-2
	D707	C-8	Q102	C-4
1	D708	B-8	Q201	F-2
	D709	B-9	Q202	B-3
	D710	B-6	Q501	,F-2
	D711	B-5	Q502	B-4
	D712	B-5	Q505	G-6
	D801	D-9	Q701	A-8
	D802	F-11	Q702	A-8
	D803	H-11	Q703	B-9
ı	D804	H-12	Q784	A-9
1	D805	F-14	Q705	E-9
	D901	D-11	Q706	D-9
	D902	C-11	Q801	D-9
	D903	C-11	Q802	F-7
	D904	D-11	Q803	F-7
ŀ	D905	C-11	Q804	F-6
	D906	D-11	Q805	F-6
	D907	B-11	Q806	F-7
1	D908	B-11	Q807	F-12
	D909	B-11	Q808	F-12
ĺ	D910	B-11	Q809	H-14
	D911	B-11	Q810	C-4
	1004/80 4)		Q811	G-10
	I C31(MD-A)	H-19	Q812	G-9
	IC31(MD-B) IC81(SW-A)	H-26	Q813	G-13
l	(C81(SW-B)	B-20 B-27	Q814 Q815	I -12
ļ	IC501	G-3	Q816	G-12
ŀ	IC502	C-2	Q817	G-12
	IC502	E-3	Q818	G-10
l	IC504	G-6	Q819	G-11 E-9
	C504	D-6	Q820	E-9 E-13
	IC506	C-3	3020	E-13
	IC701	B-8		
	IC801	F-13		
	IC802	D-6		j
	1,000			

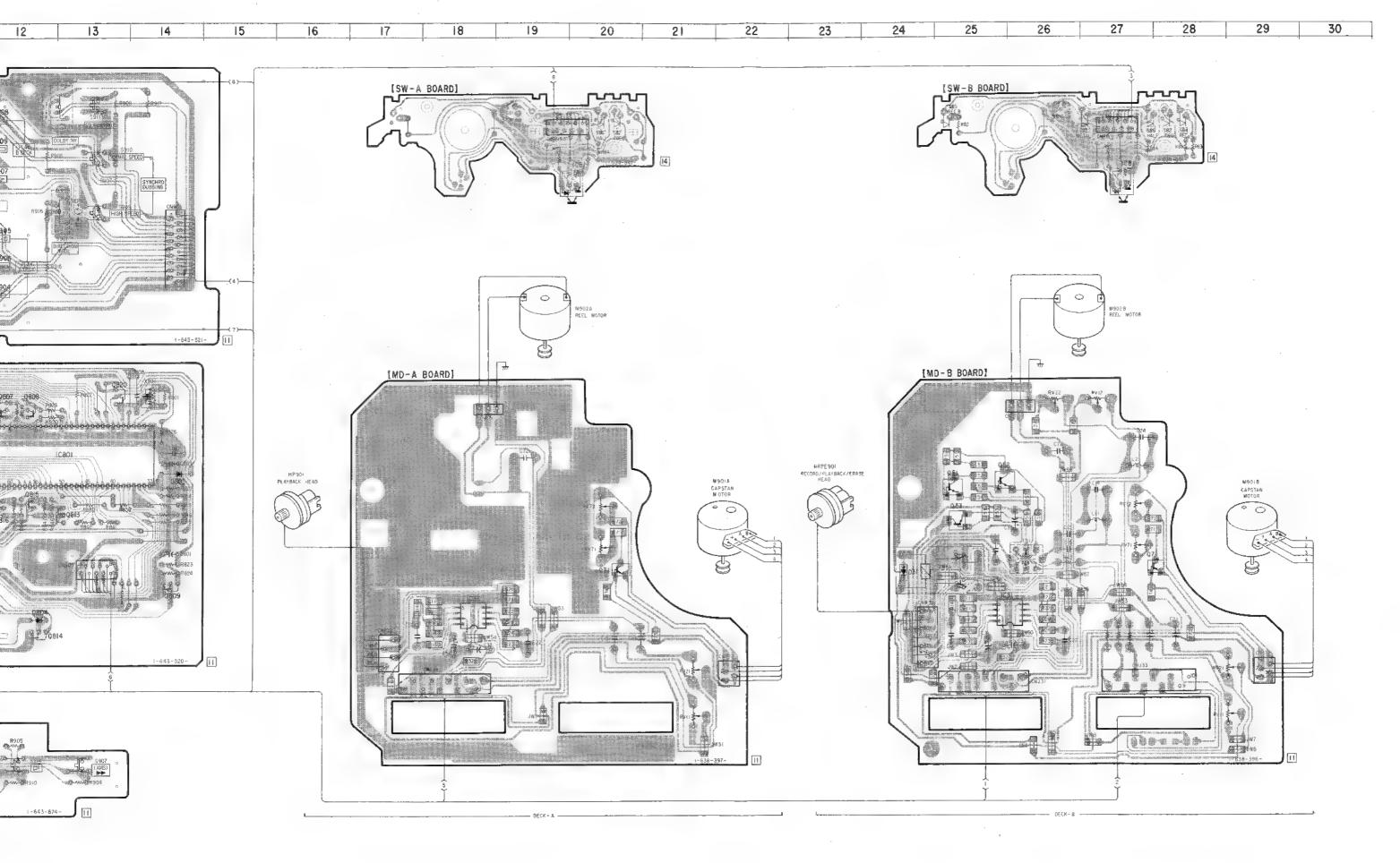
#### Note:

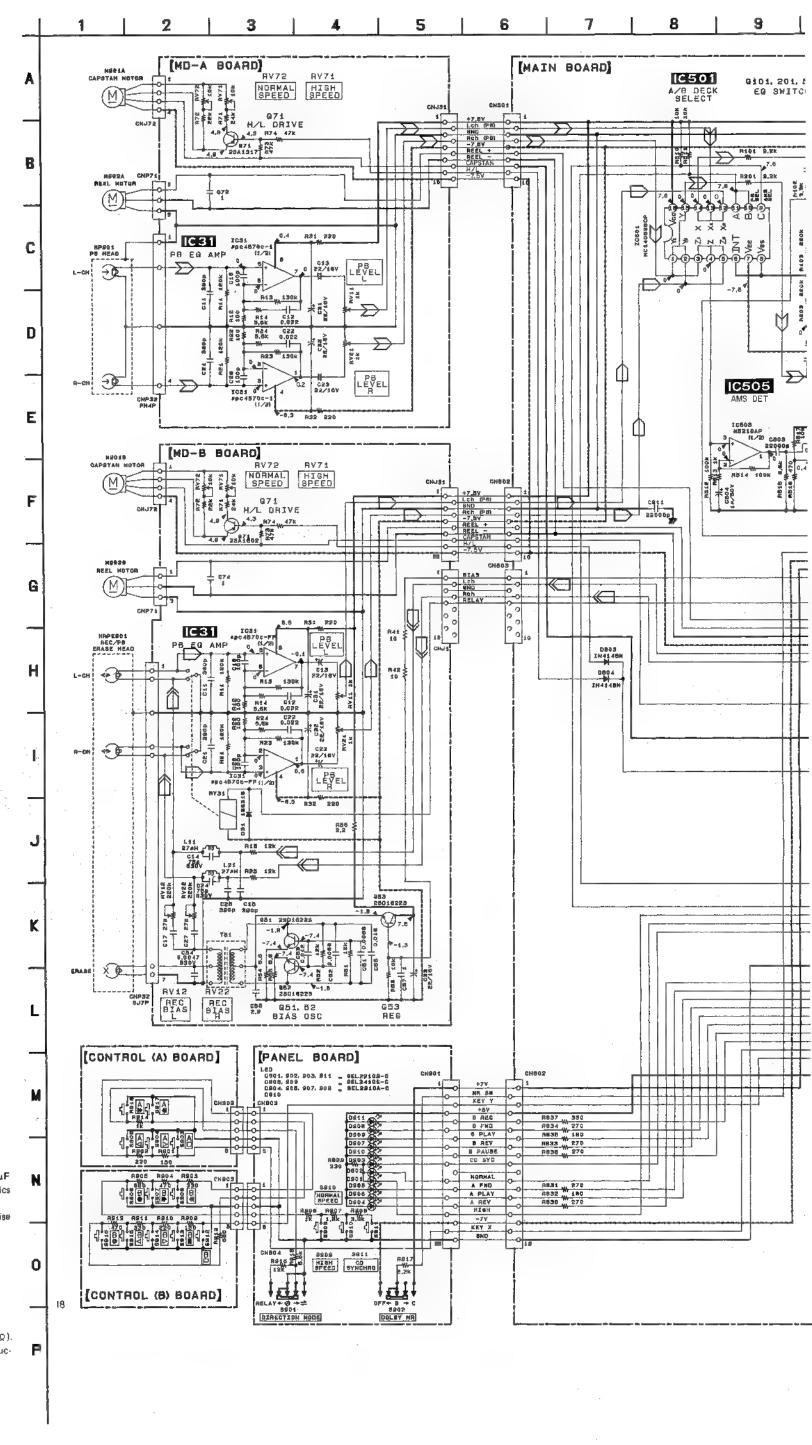
• o----: parts extracted from the component side.

EA:Saudi Arabia

AUS: Australian



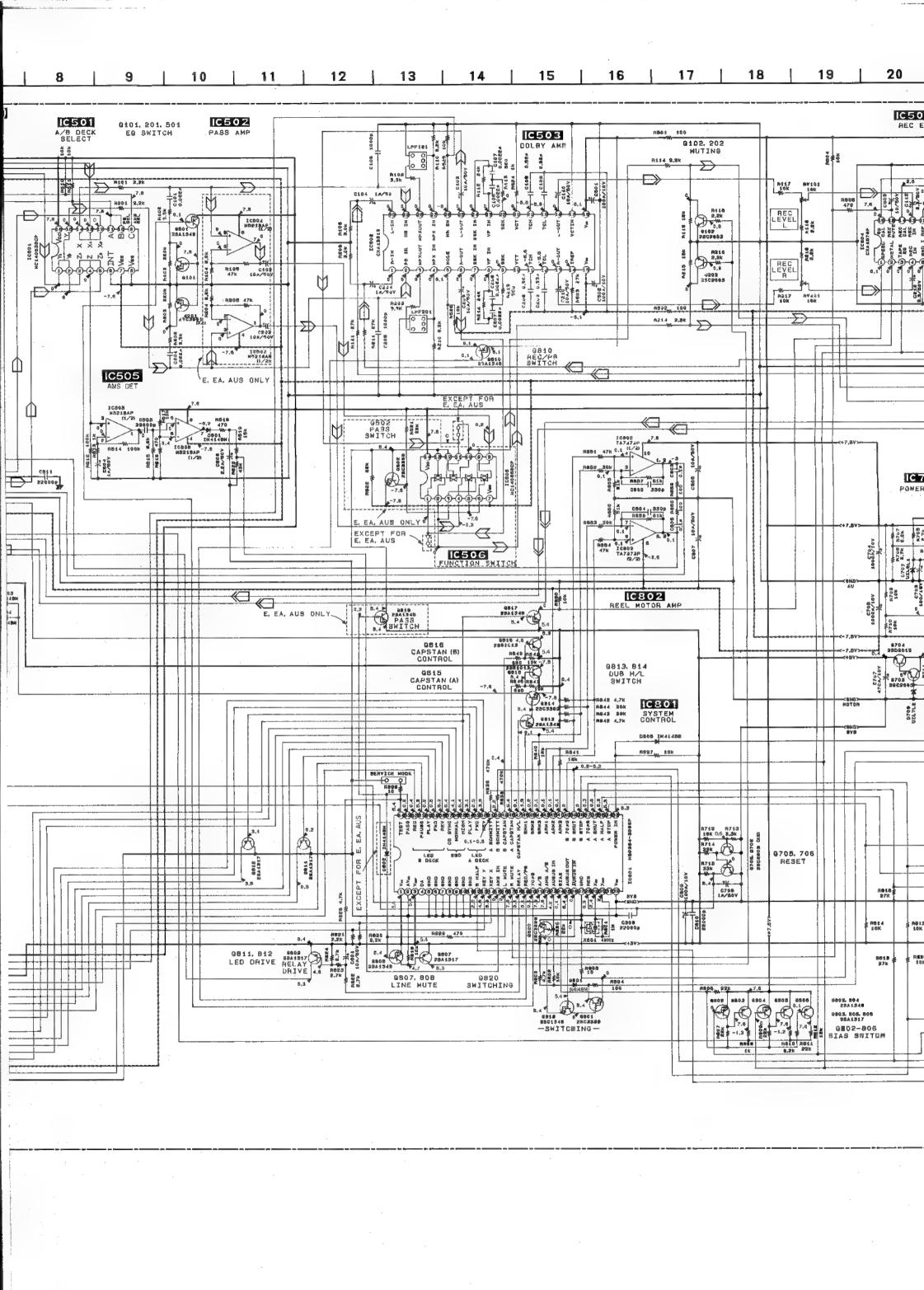


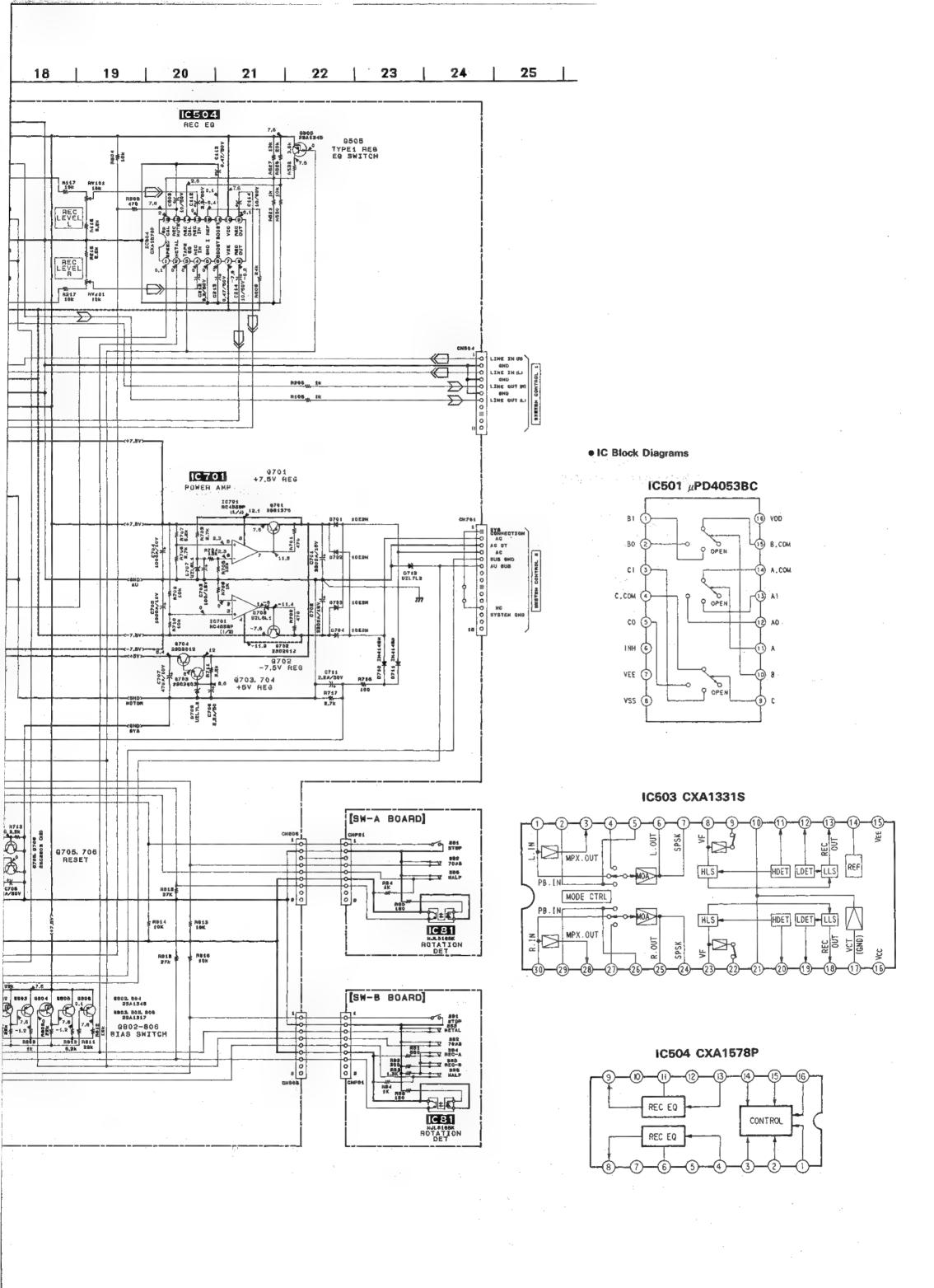


#### Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- $\bullet$  All resistors are in  $\Omega$  and  $1/4\,W$  or less unless otherwise specified.
- △ : internal component.
- B+ Line
- === : B- Line
- adjustment for repair.
- Voltage is do with respect to ground under no-signal (detuned) conditions.
- no mark: REC
   Voltages are taken with a VOM (Input Impedance 10MΩ).
   Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - > : PB (DECK A)
  - ☐ : PB (DECK B)
    ☐ : REC (DECK B)

EA:Saudi Arabia AUS:Australian





### SECTION 8 **EXPLODED VIEWS**

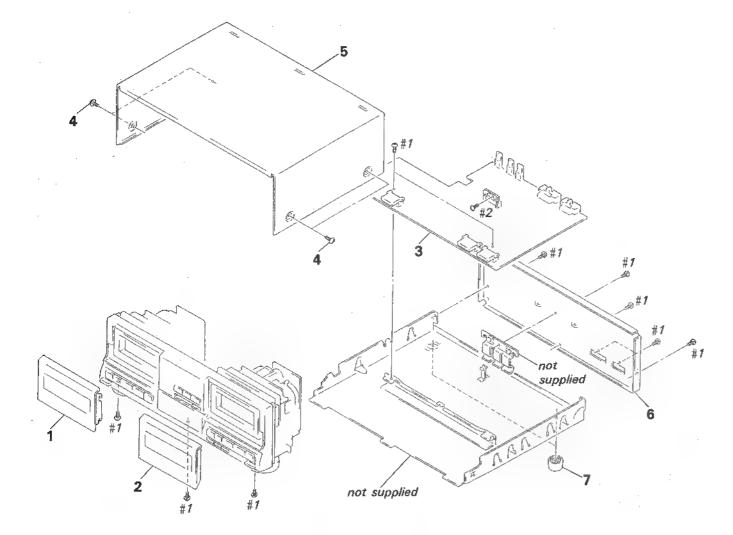
- · -XX, -X mean standardized parts, so they may have some differences from the original one.
- · Color Indication of Appearance Parts Example:

KNOB, BALANCE(WHITE)...(RED)

Parts color Cabinet's color

- · Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- · The mechanical parts with no reference number in the exploded views are not supplied.
- · hardware (#mark) list is given in the last of this parts list.
- G : Germany
- IT : Italian
- EE : East European
- EA: Saudi Arabia
- AUS : Australian

#### 6-1. OVERALL SECTION



Ref. Mo.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3364-710-1	LID (A) ASSY, CASSETTE		* 3	A-2006-742-A	MAIN BOARD, COMPLETE (E. EA. AUS	3)
		(AEP, G, EE, UK, E.	EA. AUS)	4	3-363-099-01	SCREW (CASE +3X8 TP2)	
-1	X-3364-711-1	LID (A) ASSY, CASSETTE (IT)		<b>*</b> 5	4-939-803-31	CASE (AEP, G, EE, UK, E, EA, AUS)	
2	X-3364-712-1	LID (B) ASSY, CASSETTE		<b>*</b> 5	4-939-803-71		
		(AEP, G, EE, UK, E.	EA, AUS)	<b>*</b> 6	3-377-136-11	PANEL, BACK (AEP, IT, EE, UK, E, EA	. AUS)
2	X-3364-713-1	LID (B) ASSY, CASSETTE (IT)		* 6	3-377-136-21	PANEL, BACK (G)	
<b>*</b> 3	A-2006-741-A	MAIN BOARD, COMPLETE (AEP, G, 17	, EE, UK)	7	4-931-169-01	FOOT	

#### 6-2. FRONT PANEL SECTION

Ref. No. Part No.

52

\* 53

\* 54

Description

X-3364-707-1 PANEL ASSY, FRONT (IT)

3-662-752-21 SPRING, TENSION

1-643-521-11 PANEL BOARD

3-308-823-11 SPRING

1-643-523-11 CONTROL (A) 80ARD

1-643-874-11 CONTROL (B) BOARD

3-377-110-11 KNOB (SLIDE) (IT)

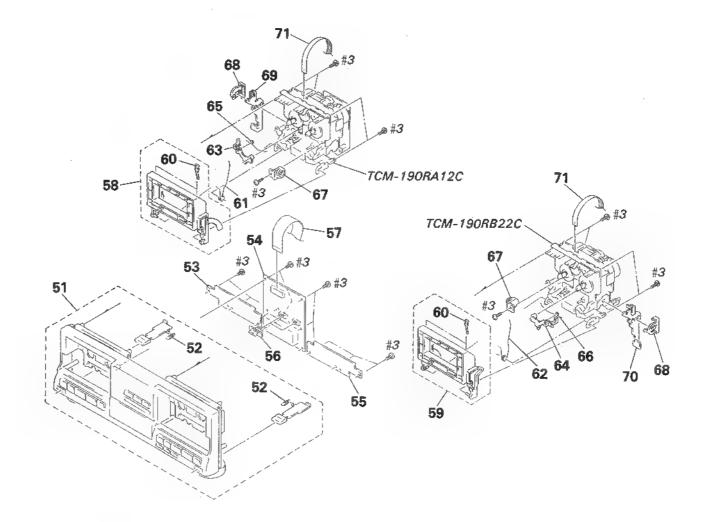
1-590-237-11 WIRE, FLAT TYPE (19 CORE)

X-3340-194-1 HOLDER (L) ASSY, CASSETTE

X-3340-195-1 HOLDER (R) ASSY, CASSETTE

X-3364-706-1 PANEL ASSY, FRONT (AEP, G. EE, UK, E. EA, AUS)

3-377-110-01 KNOB (SLIDE) (AEP, G. EE, UK, E. EA, AUS)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	De.
		*****				
61	3-354-959-01	SPRING (LOADING L). TORSION		101	3-359-455-01	\$P
62	3-354-960-01	SPRING (LOADING R), TORSION		102	3-356-714-01	WA:
63	3-354-955-01	LEVER (EJ SAFTY LEVER L)		103	X-3359-408-1	LE
64	3-354-956-01	LEVER (EJ SAFTY LEVER R)		104	3-356-713-01	WA

3-354-961-01 SPRING (EJ SAFTY SPRING L)

3-354-962-01 SPRING (EJ SAFTY SPRING R)

3-354-957-01 JOINT (LOCK LEVER)

3-363-638-01 LEVER (LOCK LEVER L)

3-363-639-01 LEVER (LOCK LEVER R)

1-690-906-11 WIRE (FLAT TYPE) (9 CORE)

3-354-963-01 DAMPER

6-3. MECHANISM

TCM-190RA1

TCM-190RB2

Remark

66

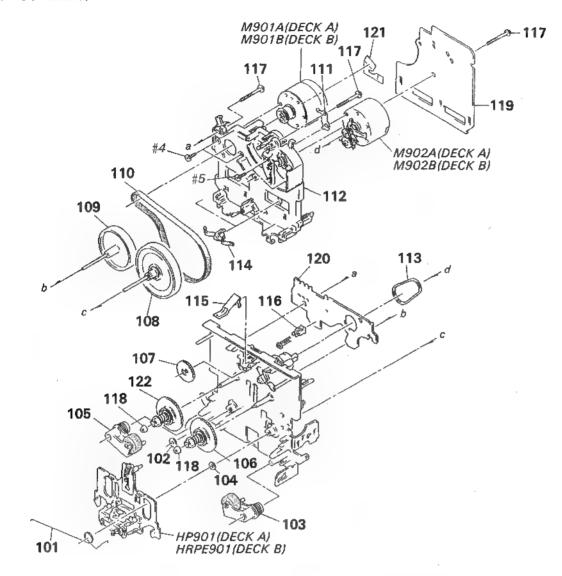
67

68

**\*** 69

#### 6-3. MECHANISM SECTION 1

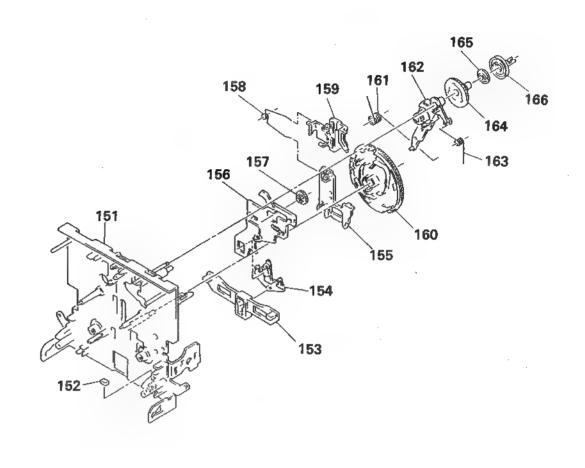
(TCM-190RA12C) TCM-190RB22C)



Remark	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description		Remark
RSION	101	3-359-455-01	SPRING, TORSION		116	3-343-419-01	HOLDER (S SENSER A)		
RSION	102	3-356-714-01	WASHER		117	3-359-414-01	SCREW (+PTPWH 2X23)		
	103	X-3359-408-1	LEVER (PINCH LEVER FWD)	ASSY	118	3-362-308-01	CAP (REEL)		
L) R)	194	3-356-713-01	WASHER		<b>*</b> 119	A-2006-399-A	MO-A BORAD, COMPLETE	(DECK A)	
6 L)	105	X-3359-409-1	LEVER (PINCH LEVER REV)	ASSY	<b>*</b> 119	A-2006-400-A	MD-B BOARD, COMPLETE	(DECK B)	
G R)	106	X-3359-404-1	TABLE ASSY, REEL		<b>*</b> 120	1-634-841-14	SW-A BOARD (DECK A)		
	107	3-359-424-01	GEAR (REV GEAR)		<b>*</b> 120	1-634-841-14	SW-B BOARD (DECK B)		
	108	X-3359-406-1	FLYWHEEL (FWD) COMPLETE	ASSY (DECK A)	121	1-638-983-11	MOTOR FLEXIBLE BOARD		
	108	X-3364-554-1	FLYWHEEL (FWD) ASSY (DE	CK B)	122	X-3362-078-1	TABLE ASSY (B), REEL		
	109	X-3359-410-1	FLYWHEEL (REV) ASSY		HP901	A-2003-837-A	BASE ASSY, HEAD (PB)	(DECK A)	
RE)	110	3-359-417-01	BELT (FLAT), CAPSTAN		HRPE90	1A-2003-838-A	BASE ASSY, HEAD (REC.	/PB/ERASE)	(DECK B
,	111	3-359-450-01	PLATE, GROUND		M901A	X-3359-417-1	MOTOR ASSY (CAPSTAN)	(DECK A)	
	<b>#</b> 112	3-359-436-01	BASE (THRUST RETAINER),	FITTING	M901B	X-3359-417-1	MOTOR ASSY (CAPSTAN)	(DECK B)	
	113	3-359-466-01	BEET (FR), SQUARE		M902A	X-3363-501-1	MOTOR ASSY (REEL) (D	ECK A)	
	114	3-575-321-00	RETAINER, THRUST, CAPST	'AN	M902B	X-3363-501-1	MOTOR ASSY (REEL) (D	ECK B)	
	115	3-359-430-01	SPRING (CASSETTE RETAINE	R), LEAF	1				

#### 6-4. MECHANISM SECTION 2

(TCM-190RA12C) TCM-190RB22C)



Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
151	X-3363-790-1	CHASSIS ASSY, MECHANICAL	(DECK	A)	159	3-359-429-01	SLIDER (BRAKE PLATE)	
t51	X-3359-415-1	CHASSIS ASSY, MECHANICAL	(DECK	B) .	160		GEAR (CAM GEAR)	
152	3-359-469-01	SPACER			161	3-359-456-01	SPRING (TRIGGER SPRING), TORSTON	
<b>*</b> 153	3-359-425-01	SLIDER (REVERSE SLIDER)			162		LEVER (FR ARM) ASSY	
154	3-359-426-01	LEVER (REVERSE LEVER)		İ	163	3-359-453-01	SPRING (FR ARM), TORSION	
<b>*</b> 155	3-359-427-01	SLIDER (LEVERSE SLIDER)			184	3-359-419-01	GEAR (FR GEAR)	
* 156	3-359-415-61	SLIDER (TRIGGER SLIDER)			165	3-359-421-01	CLUTCH (REEL DISK)	
157	3-359-448-01	GEAR (TRIGGER)			166	3-359-418-01	PULLEY (FR PULLEY)	
158	3-359-454-01	SPRING, TORSION						
				'				

# SECTION 7 ELECTRICAL PARTS LIST

MAIN

PANEL

### **CONTROL (A)**

CONTROL (B)

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- RESISTORS

All resistors are in ohms
METAL:Metal-film resistor
METAL OXIDE:Metal Oxide-film resistor
F:nonflammable

 Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items,

SEMICONDUCTORS

In each case, u;  $\mu$ , for example; uA...;  $\mu$ A..., uPA...;  $\mu$ PA..., uPB...;  $\mu$ PB...;  $\mu$ PC...;  $\mu$ PC..., uPD...;  $\mu$ PD...

- CAPACITORS
- uF: ⊭F
- COILS uH: μH

G : Germany

EA : Saudi Arabia AUS : Australian

EE : East European

When indication parts by reference number, please include the board name.

The components identified by mark A or dotted line with mark A are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque A sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifé.

Ref. No.	Part Wo.	Description		Ř	emark	Ref. Wo.	Part No.	Description		Re	mark
*	A-2006-741-A	MAIN BOARD, COMPI	LETE (AEP.	6, 17, E	E, ÜK)	C208	1-136-174-00	FILM	0. 56uF	5%	50 V
		***********	****			C209	1-136-171-00	FILM	0.33uF	5%	50 V
*	A-2006-742-A	MAIN BOARD, COMP	ETE (E, EA	(SUA)		C210	1~126-059-11	ELECT	10uF	. 20%	50 V
		**********	***			C212	1-126-162-11	ELECT	3. 3uF	20%	50V
*	1-643-521-11	PANEL 80ARD ********				C213	1-126-300-11	ELECT	0.47uF	20%	500
*	1-643-523-11	CONTROL (A) BOARD	)			C214	1-126-059-11	ELECT	10uF	20%	50 V
		*******	<b>k</b>			C501	1-124-994-11	ELECT	100uF.	20%	107
*	1-643-874-11	CONTROL (B) BOARD				C502	1-124-994-11	ELECT	100uF	20%	107
		***********	1		i	C503	1-126-059-11	ELECT	10 uF	20%	50V
						C504	1-126-301-11	ELECT	1uF	20%	507
*	3-377-119-01	HOLDER, LED									41
*	4-942-204-01	PLATE, GROUND.				C505	1-161-494-00	CERAMIC	0. 022uF		25V
	7-685-645-79	SCREW +BVTP 3)	(6 TYPE2	N-S		C508	- 1-126-161-11	ELECT `	2. 2uF	20%	50V
					.	C701	1-124-887-00	ELECT	3300uF	20%	. 16V
		< CAPACITOR >				C702	1-124-887-00	ELECT	3300 u F	20%	. 16V
	. , , , , , , , , , , , , , , , , , , ,		4-			C703	1-126-101-11	ELECT	100uF	20%	16 V
C101	1-136-157-00	FILM 0	. 022uF	5%	.50V						
C102	1-126-059-11	ELECT 1	OuF 20%	50V (E.	EA, AUS)	C70,4		ELECT	1000uF	20%	10 V
C103	1-126-059-11	ELECT 1	OuF	20%	50V	C705	1-124-473-11	ELECT	1000uF	20%	10 V
C104	1-126-301-11	ELECT 1	υF	20%	50V	C706	1-126-161-11	ELECT	2. 2uF	20%	50V
C105	1-162-294-31	CERAMIC C	. 001uF	10%	50V	6707	1-124-472-11	ELECT	470 u F	20%	10 V
						C708	1-126-301-11	ELECT	1 u F	20%	50 V
C106	1-130-475-00	MYLAR 0	. 0022uF	5%	50V						
C107	1-130-475-00	MYLAR 0	l. 0022uF	5%	50 V	C711	1-126-161-11	ELECT	2. 2uf	20%	50 V
C108	1-136-174-00	FILM 0	. 56uF	5%	50V	C801	1-126-059-11	ELECT	10 uF	20%	50 V
C109	1-136-171-00	FILM 0	. 33uF	5%	507	C802	1-162-288-31	CERÁMIC	330PF	10%	50V
C110	1-126-059-11	ELECT 1	θuF	20%	507	C803	1-136-165-00	FILM	0. 1uF	-5%	50V
						C804	1-162-288-31	CERAMIC	330PF	10%	50V
C112	1-126-162-11	ELECT 3	. 3uF	20%	507				1 4	.,	
C113	1-126-300-11	ELECT 0	L 47uF	20%	50V	C805	1-136-165-00	FILM	0. 1uF	. 5%	50 V
C114	1-126-059-11	ELECT 1	0uF	20%	50V	C806	1-126-059-11	ELECT	10uF	20%	50 V
C201	1-136-157-00	FILM 0	. 022uF	5%	50V	C807	1-126-059-11	ELECT	10uF	20%	50V
C202	1-126-059-11	ELECT 1	OuF 20%	50V (E.	EA, AUS)	C808	1-161-494-00	CERAMIC	0. 022uF		25V
						C809	1-124-994-11	ELECT	100uF	20%	107
C203	1-126-059-11	ELECT 1	CuF	20%	50V						
C204	1-126-301-11	ELECT 1	uF	20%	50V	C810	1-161-494-00	CERAMIC	0. 022uF		25V
C205	1-162-294-31	CERAMIC 0	.001uF	10%	50V	0811	1-161-494-00	CERAMIC	0. 022uF		25V
C206	1-130-475-00	MYLAR 0	. 0022uF	5%	50V			*			
C207	1-130-475-00	MYLAR 0	. 0022uF	5%	50V						

## MAIN PANEL CONTROL (A) CONTROL (B)

V ( ) 1101	Part No.	Description	Remark	Ref. No.	Part No.	Description		Remark
		< CONNECTOR >		10504	8-752-055-61 8-759-634-51			
CN501	1-580-784-11	CONNECTOR, BOARD TO BOARD	ļ.					
CN502	1-580-784-11	CONNECTOR, BOARD TO BOARD					BCP (E, EA, AUS)	*
CN503	1-580-784-11	CONNECTOR, BOARD TO BOARD .			8-7-59-945-58			
CN504	1-566-858-41	SOCKET, CONNECTOR 11P (SYSTEM	CONTROL 1)		8-759-061-69			
CN701		SOCKET, CONNECTOR 15P (SYSTEM	(CONTROL 2)	16802	8-759-207-05	IC TA7272F	•	
CN802	1-568-802-11	SOCKET, CONNECTOR 19P				< FILTER >		
CN803	1-691-670-11	CONNECTOR. BOARD TO BOARD	,					
CN804	1-691-670-11	CONNECTOR, BOARD TO BOARD 59	)		1-236-087-11			
CN805	1-568-828-11	SOCKET, CONNECTOR 9P		LPF201	1-236-087-11	FILTER, LOW	PASS	
CN806	1-568-828-11	SOCKET. CONNECTOR 9P				< TRANSISTOR	<b>?</b> >	
CN901	1-568-862-11	SOCKET, CONNECTOR 19P	-					
CN902	1-691-746-11	CONNECTOR, BOARD TO BOARD 51	·		8-729-900-74			
CN903	1-691-746-11	CONNECTOR. BOARD TO BOARD 51	,	0102	8-729-620-05			
2,,,,,,,,,		•		Q201	8-729-900-74			
		< DIODE >			8-729-620-05			
			.	Q501	8-729-900-61	TRANSISTOR	DTA114ES	
D501	8-719-987-63		!			THE DATE OF SEC.	DT011450 (F. 5	4 41103
	8-719-200-77				8-729-900-89			A, AUS)
	8-719-200-77				8-729-900-65			
	8-719-200-77				8-729-141-83		2SB1094-LK 2SD2012	
D704	8-719-200-77	DIODE 10E2N		Q702 - Q703	8-729-209-15 8-729-620-05		25C2603-EF	
D707	8-719-933-33	DIODE HZS6A1L						
	8-719-933-33				8-729-209-15			
	8-719-000-78				8-729-620-05			
	8-719-987-63				8-729-620-05			
0711	8-719-987-63	D10DE 1N4148M			8-729-900-89			
				Q802	8-729-900-61	TRANSISION	DTA114ES	
	8-719-000-78			0003	8_720_821_04	AULTSISART	28A1317-STU	
	8-719-987-63		E TINY		8-729-900-61		DTA114ES	
	8-719-987-63		C, UK)		8-729-821-04			
	8-719-987-63				8-729-821-04			
D804	8-719-987-63	DIODE 1N4148M			8-729-821-04		28A1317-STU	
D805	8-719-987-63	DIODE 1N4148M			*			
	₹8-719-301-38			8080	8-729-900-61			
	8-719-301-38	LED SEL2210S-C (NORMAL)		0809	8-729-821-04		2SA1317-STU	
D903 -	8-719-301-38	LED SEL2210S-C (CD SYNC	H)	0810		TRANSISTOR		
D904	8-719-302-41	LED SEL2910A-C (A FWD)		Q811 Q812	8-729-821-04 8-729-821-04		28A1317-STU 28A1317-STU	
0905	8-719-302-41	LED SEL2910A-C (A REV)						
D906				0813	8-729-900-61	TRANSISTOR	DTA114ES	
	8-719-302-41			0814		TRANSISTOR	DTC144ES	
D908					: 8-729-801-84		2SB1013-4	
	18-719-301-4				8-729-801-84 8-729-900-61		2SB1013-4 DTA114ES	
D3.03		LED SELZ910A-C (PAUSE)	,	Q817	9-173-300-0	I INAMOTOTON	DIRTIALS	
	· 9710_209 41	LELY GELISION UNIVEL		0818	8-729-900-65	TRANSISTOR	DTA144ES (E. E	A, AUS)
D910	8-719-302-41 8-719-301-31		1	4010				
D910	8-719-302-4 8-719-301-3			0819	8-729-900-61	TRANSISTOR	DTA114ES	
D910					8-729-900-61 8-729-900-89	TRANSISTOR	DTA114ES DTC144ES	
D910 D911	8-719-301-3	3 LED		0819	8-729-900-61	TRANSISTOR	DTA114ES DTC144ES	
D910 D911	8-719-301-31 8-759-140-5	3 LED		0819	8-729-900-61	TRANSISTOR TRANSISTOR	DTA114ES DTC144ES	1/4₩

## MAIN PANEL CONTROL (A) CONTROL (B)

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R102	1-249-423-11		3. 3K	5%	1/4₩	R520	1-247-870-11	CARBON	43 K	5%	
R103	1-247-887-00				1/4W	R521	1-249-433-11		22K		1/4W (E, EA, AUS)
R104					1/4W (E, EA, AUS)		1-249-433-11				1/4W (E, EA, AUS)
R105		CARBON			1/4W (E, EA, AUS)	R524	1-249-417-11				1/4W
						R525	1-249-429-11	CARBON	10K	5%	
R106	1-249-417-11	CARBON	1 K	5%	1/4W						7
R108	1-247-842-11		3 K		1/4W	R526	1-249-429-11	CARBON	10K	5%	1/4W.
R109	1-249-423-11	CARBON	3.3K	5%	1/4W	R527	1-247-858-11	CARBON	13K	5%	1/4W
R110	1-249-428-11	CARBON	8. 2K	MI.	· 1/4W :	R528	1-247-862-11		20K	88	1/4W
R111	1-249-434-11	CARBON	27K	5%	1/4W	8529	1-249-417-11	CARBON	1 K	5%	1/4W
						R530	1-249-429-11	CARBON	10K	5%	1/4W
R112	1-247-864-11	CARBON	24K	5%	1/4W						
R113	1-249-414-11	CARBON	560	XII.	1/4W	R532	1-247-844-11	CARBON	3. 6K		1/4W
R114	1-249-421-11		2. 2K		1/4W		1-249-413-11		470	5%	1/4W
·R115	1-249-431-11	CARBON	15K	5%	1/4W		1-249-413-11		470	5%	
R116	1-249-421-11	CARBON	2. 2K	5%	1/4W			CARBON	2. 7K	5%	-
						R704 :	1-247-858-11	CARBON		5%	
R117	1-249-429-11	CARBON	10K	5%	1/4W				:		
R118		CARBON						CARBON		5%	
R201	1-249-421-11	CARBON					1-249-417-11		1 K	5%	
R202	1-249-423-11		3. 3K				1-247-850-11		6. 2K		•
R203	1-247-887-00	CARBON.	220K	5%	1/4W		1-249-422-11		2. 7K		
							1-249-429-11		10K		
R204	1-249-421-11	CARBON	2. 2K	5%	1/4W (E, EA, AUS)						
R205	1-249-437-11	CARBON	47K	5%	1/4W (E, EA, AUS)	R710	1-249-429-11	CARBON	10K		,
R206	1-249-417-11	CARBON CARBON	1K 5	5%	1/4W	R711	1-249-421-11	CARBON	2. 2K		•
	1-247-842-11	CARBON	3 K	5%	1/4W		1-249-432-11	CARBON	18K		1/4W
R209	1-249-423-11	CARBON	3. 3K	5%	1/4W	R713		CARBON	3. 3K		
				_	4 / 1111	R714.	1-249-433-11	CARBON	22K	5%	1/4W :
R210	1-249-428-11	CARBON	8, 2K	EM	1/4W		1 0 10 105 11	O A TROOM	661	F#/	4.7400
R211	1-249-434-11		27K					CARBON			•
R212		CARBON:				R716		CARBON	1.00	5%	· .
R213		CARBON		5%		R717	1-249-422-11	CARBON			•
R214	1-249-421-11	CAKBUN	2. 2K	<b>07</b> 6	1/4W		1-247-903-00 1-249-429-11		- 1M 10K	5%	1/4W. - 1/4W
DOSE	1 040 491 11	CARBON	157	- 54	1770	NOU2	1-249-423-11	CANDUN	IVK	un.	17 48
R215 R216	1-249-431-11				1/4W	Dana	1-249-425-11	CAPRON	4:7K	6%	1/4W
R210	1-249-421-11		10K				1-249-405-11		100		: 1/4W
R218	1-249-429-11		2. 2K				. 1-249-393-11		10	5%	
	1-249-405-11				1/4W		1-249-433-11				1/4W:
nou :	1-245-400-11	VARDOR	100	0/0	(7 111		1-249-433-11				1/4W
R502	1-249-405-11	CARRON	100	.5%	1/4W					***	.,
R503		CARBON		5%		R808	1-249-417-11	CARBON	18	5%	1/4W
R504	1-249-429-11		1-0 K	5%	· .	R809	1-249-433-11		22K	5%	1/4W
R505	1-249-413-11		470	5%	· .	R810	1-247-850-11		6.2K	5%	* 1/4W
R506	1-247-864-11		24K	5%	1/4W	R811	1-249-433-11	CARBON	22K -	5%	1/4W
						R812	1-249-430-11		12K	5%	1/4W
R510	1-249-429-11	CARBON	10 K	5%	1/4W	,				:.	
R511	1-249-429-11		10K	5%		R813	1-249-429-11	CARBON	10K 😘		1/4W:
R512	1-249-441-11			5%	· 1/4W	R814	1-249-429-11	CARBON	10K	5%	1/4W
R513	1-249-417-11		.1K ·	5%	1/4W-	R815	1-249-434-11	CARBON	- 27K	5%	1/4W ×
R514	1-249-441-11		100K	5%		R816	1-249-429-11	CARBON	10K	5%	1/4W
*.					*	R818	1-249-434-11	CARBON	27K	5%	1/4W
R515	.1-249-427-11	CARBON	6. 8K	5%	- 1/4W						
R516	1-249-413-11	CARBON	470	5%	1/4W	R819	1-249-429+11	CARBON	10K	-5%	.1/4W
R517	1-249-429-11	CARBON	10 K	5%	1/4W	R820	1-249-421-11	CARBON	2. 2K	5%	1/4W
R518	1-249-413-11	CARBON	470	5%	1/4W:	R821	1-249-421-11	CARBON	2. 2K	5%	1/4W
R519	1-249-431-11	CARBON	15K	5%	1/4₩	. R822	1-249-422-11	CARBON	2.7K	5%	1/4W
	•										

# MAIN PANEL CONTROL (A) CONTROL (B) MD-A

Re22		Part No.	Description					nark	Ref. No.	Part No.	Description			mark
R244 -1-244-412-11 CARBON		1-249-422-11			2. 7.K	5%.				1-249-409-11	CARBON	220 5%		
R252   1-244-425-11 CARBON									R911	1-249-411-11	CARBON	330 5%	1/4W	
R826   -1-24-423-11 CARBON	R824	1-249-422-11	CARBON		2.7K	98	1/4W		R912	1-249-413-11	CARBON	470 5%	1/4W	
R825   1-245-433-11 CARBON   22K   5%   1/6W   R913   1-245-435-11 CARBON   38D   5%   1/6W   R914   1-245-435-11 CARBON   176   5%   1/6W   R915   1-245-435-11 CARBON   5.6   5%   1/6W   S915   1-554-635-11 SWITCH, SIDE (DIRECTION)   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.6   5.							1/4W							
R829		1-249-433-11	CARBON		22K	5%	1/4W		R913	1-249-415-11	CARBON	680 5%	1/4W	
Read					10K	5%	1/4₩		R914	1-249-417-11	CARBON	1 K 5%	1/4W	
R129   1-249-410-11 CARBON   330   5K   1/4W   R330   1-249-410-11 CARBON   270   III   1/4W   R331   1-249-411-11 CARBON   270   III   1/4W   R331   1-249-429-11   CARBON   18K   III							- 1/4W		R915	1-249-426-11	CARBON	5. 6K 5%	1/4W	
R229   1-242-411-11 CARDON   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270   270							•							
### ### ##############################	P220	1-2/9-/11-11	CARRON		330	5%	174W -				S			
R331   -249-410-11 CARBON   180   5%   1/4W   RV101   1-241-830-11 RES. ADJ. CARBON 10K   RV281   1-249-408-11 CARBON   270   5%   1/4W   RV101   1-241-830-11 RES. ADJ. CARBON 10K   RV281   1-249-408-11 CARBON   270   5%   1/4W   RV281   1-249-401-11 CARBON   270   5%   1/4W   S801   1-572-378-11 SWITCH, SLIDE (DIRECTION)   S837   1-249-411-11 CARBON   470   5%   1/4W   S802   1-572-378-11 SWITCH, SLIDE (DIRECTION)   S839   1-549-808-21 SWITCH, TACTILE (A STOP)   S839   1-549-808-21 SWITCH, TACTILE (A STOP)   S840   1-249-639-11 CARBON   15K   5%   1/4W   S802   1-564-308-21 SWITCH, TACTILE (A RV2)   S804   1-249-408-11 CARBON   47K   5%   1/4W   S805   1-564-308-21 SWITCH, TACTILE (A RV2)   S804   1-249-408-11 CARBON   47K   5%   1/4W   S808   1-554-308-21 SWITCH, TACTILE (A RV2)   S808   1-549-308-21 SWITCH, TACTILE (A RV3)   S808   1-549-308-21 SWITCH, TACTILE (A RV4)												2. 2	.,	
R832   1-248-408-11   CARBON   270   5%   1/4W   RV201   1-241-830-11   RES. ADJ. CARBON 1BK   RV201   1-241-830-11   CARBON   330   5%   1/4W   S001   1-572-378-11   SWITCH, SLIDE (DIDERCTION)   RES. ADJ. CARBON 1BK   RV201   RES. ADJ. CARBON 1BK   RV201   RES. ADJ. CARBON 1BK   RV201   RV201   RES. ADJ. CARBON 1BK   RV201											< VARIABLE RESI:	STOR >		
R833   1-249-410-11 CABBON   270   5%   1/4W   RV101   1-241-580-11 RES, ADJ, CARBON 10K   R836   1-246-408-11 (CABBON   270   5%   1/4W   S837   1-249-410-11 CABBON   270   5%   1/4W   S837   1-249-411-11 CABBON   270   5%   1/4W   S837   1-249-411-11 CABBON   270   5%   1/4W   S837   1-249-411-11 CABBON   470K   5%   1/4W   S837   1-249-411-11 CABBON   470K   5%   1/4W   S837   1-249-428-11 CABBON   470K   5%   1/4W   S839   1-572-378-11 SWITCH, SLIDE (DOLBY NR)   S839   1-247-885-80   CABBON   15K   5%   1/4W   S830   1-554-383-21 SWITCH, SLIDE (DOLBY NR)   S830   1-554-383-21 SWITCH, TACTILE (A STOP)   S834   1-247-865-11 CABBON   15K   5%   1/4W   S830   1-554-383-21 SWITCH, TACTILE (A STOP)   S830   1-564-383-21 SWITCH, TACTILE (A REV)   S							-				· FINITIONE HEAT	,,,,,,		
R834 1-249-410-11 CARBON 278 5% 1/4W				٠.				٠.	RV101	1-241-630-11	RES. ADJ. CARRO	N 1nK		
R834   -248-410-11 CABBON	Noss	-243-410-11	OKINDON		210	V/#	17 411							
R835 1-249-410-11 CARBON 270 5% 1/4W S901 1-572-378-11 SWITCH, SLIDE (DIRECTION) R838 1-247-805-00 CARBON 470 5% 1/4W S902 1-572-378-11 SWITCH, SLIDE (DIRECTION) R838 1-247-805-00 CARBON 470 5% 1/4W S902 1-572-378-11 SWITCH, SLIDE (DIRECTION) R839 1-247-805-00 CARBON 470 5% 1/4W S902 1-572-378-11 SWITCH, SLIDE (DIRECTION) R840 1-247-805-01 CARBON 15K 5% 1/4W S902 1-554-303-21 SWITCH, TACTILE (A FWD) R841 1-249-427-11 CARBON 15K 5% 1/4W S902 1-554-303-21 SWITCH, TACTILE (A FWD) R842 1-249-425-11 CARBON 20K 5% 1/4W S903 1-554-303-21 SWITCH, TACTILE (A FED) R843 1-247-862-11 CARBON 20K 5% 1/4W S903 1-554-303-21 SWITCH, TACTILE (B FED) R844 1-248-425-11 CARBON 4,7K 5% 1/4W S903 1-554-303-21 SWITCH, TACTILE (B FED) R845 1-249-425-11 CARBON 4,7K 5% 1/4W S903 1-554-303-21 SWITCH, TACTILE (OB NORMAL SPEED) R846 1-249-425-11 CARBON 680 5M 1/4W S912 1-554-303-21 SWITCH, TACTILE (OB SYNCHRO) R848 1-249-429-11 CARBON 10K 5% 1/4W S912 1-554-303-21 SWITCH, TACTILE (OB SYNCHRO) R849 1-249-429-11 CARBON 10K 5% 1/4W S912 1-554-303-21 SWITCH, TACTILE (OB SYNCHRO) R850 1-247-866-11 CARBON 30K 5M 1/4W S912 1-554-303-21 SWITCH, TACTILE (G FYS) R851 1-249-437-11 CARBON 30K 5M 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R851 1-249-437-11 CARBON 30K 5M 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R853 1-247-866-11 CARBON 30K 5M 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R855 1-247-866-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R855 1-247-872-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R856 1-249-405-11 CARBON 100 5K 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R857 1-247-872-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R858 1-247-872-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R859 1-249-303-11 CARBON 100 5K 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R859 1-249-303-11 CARBON 100 5K 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R850 1-249-303-11 CARBON 100 5K 1/4W S915 1-554-303-21 SWITCH, TACTILE (G FYS) R850 1-249-407-11 CARBON 100 5K 1/4		1 040 410 11	CARDON		970	EW	1.749		107201	1 241 000 11	HEG, RDO, ORBOO	J. PVK		
R836   1-249-410-11   CARBON   270   SK   1/4W   S801   1-572-878-11   SWITCH, SLIDE (DIRECTION)											/ DWITOU \			
R837   1-249-411-11 CARBON							٠.				C SWITCH >			
R838   1-247-855-00   CARBON   470K   5%   1/4W   S802   1-572-378-11   SWITCH, SLIDE (DOLEY NA)							* .		. 0001	1 570 270 11	OWLTON OLINE /	BIDEOTIONS		
R839 1-247-885-00 CARBON 476K 5% 1/4W S904 1-554-303-21 SWITCH, TACTILE (A STOP)  R840 1-249-436-11 CARBON 15K 5% 1/4W S905 1-564-303-21 SWITCH, TACTILE (A FWD)  R841 1-249-435-11 CARBON 4,7K 5% 1/4W S806 1-554-303-21 SWITCH, TACTILE (A FRW)  R842 1-249-425-11 CARBON 20K 5% 1/4W S806 1-554-303-21 SWITCH, TACTILE (B FRW)  R843 1-248-425-11 CARBON 20K 5% 1/4W S809 1-554-303-21 SWITCH, TACTILE (B FRC)  R844 1-248-425-11 CARBON 800 50 1/4W S809 1-554-303-21 SWITCH, TACTILE (B FRC)  R845 1-248-415-11 CARBON 800 50 1/4W S810 1-554-303-21 SWITCH, TACTILE (DUB HIGH SPEED)  R846 1-249-439-11 CARBON 680 5% 1/4W S810 1-554-303-21 SWITCH, TACTILE (DUB HIGH SPEED)  R848 1-249-429-11 CARBON 680 5% 1/4W S811 1-554-303-21 SWITCH, TACTILE (B STOP)  R849 1-249-429-11 CARBON 10K 5% 1/4W S913 1-554-303-21 SWITCH, TACTILE (B STOP)  R850 1-247-865-11 CARBON 30K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B FWD)  R851 1-249-439-11 CARBON 30K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B RWS)  R852 1-247-865-11 CARBON 30K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B RWS)  R853 1-247-865-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B RWS)  R854 1-249-437-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B RWS)  R855 1-247-865-11 CARBON 51K 5% 1/4W S915 1-554-303-21 SWITCH, TACTILE (B RWS)  R856 1-247-871-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R857 1-247-885-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R858 1-249-439-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R859 1-249-405-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R859 1-249-405-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R859 1-249-393-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R850 1-249-393-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R850 1-249-393-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R850 1-249-393-11 CARBON 51K 5% 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RWS)  R850 1-249-393-11 CARBO												,		
R339   1-247-885-00 CARBON			CARBON											
R840   1-247-860-11 CARBON   15K   5K   1/4W								:						
R841 1-249-425-11 CARBON									1	P. Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of				
R842   1-249-425-11   CARBON   20K   3/4W   S806   1-564-303-21   SWITCH, TACTILE (3 REW)   S808   1-249-425-11   CARBON   20K   3/4W   S809   1-554-303-21   SWITCH, TACTILE (3 REW)   S809   1-554-303-21   SWITCH, TACTIL									2302	1-554-593-21	SWITCH, TACTILE	(A REV)		
R848   1-247-862-11 CARBON   20K   5M   1/4W   S908   1-554-303-21 SWITCH, TACTILE (9 FF)   S908   S918   1-554-303-21 SWITCH, TACTILE (9 FF)   S918   1-554-303-21 SWITCH, TACTILE (9 FW)   S918   1-5														
Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   S														
R844   1-247-862-11 CARBON   20K   10	R843	1-247-862-11	CARBON			5%	· 1/4W							
R845   1-249-425-11   CARBON   630   Mil   1/4W   S811   1-554-303-21   SWITCH, TACTILE (DUB NORMAL SPEED)   R846   1-249-425-11   CARBON   630   Mil   1/4W   S811   1-554-303-21   SWITCH, TACTILE (B STOP)   S813   1-554-303-21   SWITCH, TACTILE (B STOP)   S813   1-554-303-21   SWITCH, TACTILE (B STOP)   S813   1-554-303-21   SWITCH, TACTILE (B PAUSE)   R848   1-249-429-11   CARBON   10K   Mil   1/4W   S814   1-554-303-21   SWITCH, TACTILE (B PAUSE)   R859   1-249-429-11   CARBON   47K   5%   1/4W   S815   1-554-303-21   SWITCH, TACTILE (B RWS)   R851   1-249-437-11   CARBON   30K   Mil   1/4W   S815   1-554-303-21   SWITCH, TACTILE (B RWS)   S818   1-554-303-21   SWITCH, TACTILE (B RWS)   S	Ph.													
R845 1-249-415-11 CARBON 680 EM 1/4W S311 1-554-303-21 SWITCH, TACTILE (CD SYNCHRO) R848 1-249-415-11 CARBON 10K 5% 1/4W S312 1-554-303-21 SWITCH, TACTILE (B STOP) S313 1-554-303-21 SWITCH, TACTILE (B STOP) S313 1-554-303-21 SWITCH, TACTILE (B STOP) S313 1-554-303-21 SWITCH, TACTILE (B FWD) R850 1-249-429-11 CARBON 10K MM 1/4W S314 1-554-303-21 SWITCH, TACTILE (B FWD) R851 1-249-437-11 CARBON 47K 5% 1/4W S315 1-554-303-21 SWITCH, TACTILE (B FWD) R852 1-247-866-11 CARBON 30K SM 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RVS) R853 1-247-865-11 CARBON 30K SM 1/4W S916 1-554-303-21 SWITCH, TACTILE (B RVS) R855 1-247-872-11 CARBON 51K 5% 1/4W S918 1-554-303-21 SWITCH, TACTILE (B RVS) R855 1-247-872-11 CARBON 51K 5% 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S818 1-554-303-21 SWITCH, TACTILE (B RVS) S819 1-549-332-21 SWITCH, TACTILE (B RVS) S819 1-554-303-21 SW	R844	1-247-862-11	CARBON											
R847   1-249-429-11   CARBON   10K   5%   1/4W   S911   1-554-303-21   SWITCH, TACTILE (CD SYNCHRO)	R845	1-249-425-11	CARBON						\$910	1-554-303-21	SWITCH, TACTILE	(DUB. NORMA)	L SPEED)	1.
R848   1-249-415-11   CARBON   680   5%   1/4W   S912   1-554-303-21   SWITCH,   TACTILE (8 STOP)	R846 .	1-249-415-11	CARBON		680	988								
R849   1-249-429-11 CARBON   10K   MI   1/4W   S914   1-554-303-21 SWITCH, TACTILE (8 FWD)	R847	1-249-429-11	CARBON		10K	5%	1/4W		\$911	1-554-303-21	SWITCH, TACTILE	(CD SYNCHRO	0)	
R849 1-249-429-11 CARBON 10K MI 1/4W S914 1-554-303-21 SWITCH, TACTILE (6 FWD) R850 1-249-429-11 CARBON 10K MI 1/4W S915 1-554-303-21 SWITCH, TACTILE (6 RWS) R851 1-249-437-11 CARBON 30K MI 1/4W S916 1-554-303-21 SWITCH, TACTILE (6 RRC MUTE) R852 1-247-866-11 CARBON 30K MI 1/4W S917 1-554-303-21 SWITCH, TACTILE (A REW) R853 1-247-866-11 CARBON 30K 5% 1/4W S917 1-554-303-21 SWITCH, TACTILE (A REW) R854 1-249-437-11 CARBON 51K 5% 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R855 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R856 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R857 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (A REW) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B RUS) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R858 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R859 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R859 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R859 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R851 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R851 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R851 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R852 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R853 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R852 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R853 1-247-872-11 CARBON 51K MI 1/4W S918 1-554-303-21 SWITCH, TACTILE (B REC MUTE) R854 1	R848	1-249-415-11	CARBON		680	- 5%	- 1/4W		I					
R850 1-249-429-11 CARBON		200			* - 7.				\$913	1-554-303-21	SWITCH, TACTILE	(B PAUSE)		
R851: 1-249-437-11 CARBON	R849	1-249-429-11	CARBON		10K	MI	1/4W		\$914	1-554-303-21	SWITCH, TACTILE	(B FWD)		
R852 1-247-866-11 CARBON 30K 5M 1/4W S916 1-554-303-21 SWITCH, TACTILE (8 REC MUTE) R853 1-247-866-11 CARBON 30K 5% 1/4W S917 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-564-303-21 SWITCH, TACTILE (A REW) S918 1-554-303-21 SWITCH, TACTILE (A REW) S918 1-544-803-21 SWITCH, TACTILE (A REW) S918 1-544-803-21 SWITCH, TACTILE (A REW) S918 1-544-803-21 SWITCH, TACTILE (	R850	1-249-429-11	CARBON		. 10K -	VIII.	1/4W		8915	1-554-303-21	SWITCH, TACTILE	(B RVS)		
R853 1-247-868-11 CARBON	R851	1-249-437-11	CARBON		47K	5%	- 1/4W-				,			
R854   1-249-437-11   CARBON   47K   5%   1/4W	R852	1-247-866-11	CARBON		30K		1/4W		\$916	1-554-303-21	SWITCH, TACTILE	(B REC MUT	E)	
R854 1-249-437-11 CARBON	R853	1-247-866-11	CARBON		30K	- 5%	1/4W	-	\$917	1-554-303-21	SWITCH, TACTILE	(A REW)		
R855. T-247-872-17 CARBON 51K 5% 1/4W	7								\$918	1-554-303-21	SWITCH, TACTILE	(A: EF)		
R855	R854	1-249-437-11	CARBON		47K -	5%	1/4W							
R857 1-247-872-11 CARBON 51K 5% 1/4W X801 1-577-358-21 VIBRATOR, CERAMIC (4MHz)  R858 1-247-872-11 CARBON 51K 5% 1/4W ************************************					51K	5%	1/4W	:			< VIBRATOR >			
R858 1-247-872-11 CARBON 51K 5% 1/4W ************************************	R856	1-247-872-11	CARBON		51K	Mi	1/4W							
R858 1-247-872-11 CARBON 51K 5% 1/4W ************************************	R857	1-247-872-11	CARBON		51K	5%	1/4W		X801	1-577-358-21	VIBRATOR, CERAM	1C (4MHz)		
R859 1-249-405-11 CARBON 100 5M 1/4W * A-2006-399-A MD-A BOARD, COMPLETE ***********************************									I .					****
R859 1-249-405-11 CARBON 100 5M 1/4W * A-2006-399-A MD-A BOARD, COMPLETE ***********************************							•							
R860 1-249-405-11 CARBON 100 5% 1/4W									* .	A-2006-399-A	MD-A BOARD. COM	PLETE -		
R899 1-249-393-11 CARBON 10 5% 1/4W R901 1-249-407-11 CARBON 150 5% 1/4W R902 1-249-409-11 CARBON 220 5% 1/4W  R903 1-249-411-11 CARBON 330 5% 1/4W C11 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R904 1-249-413-11 CARBON 470 5% 1/4W C12 1-136-157-00 FILM 0.022uF 5% 50V R905 1-249-415-11 CARBON 680 5% 1/4W C13 1-124-234-00 ELECT 22uF 20% 16V R906 1-249-417-11 CARBON 1K 5% 1/4W C14 1-163-117-00 CERAMIC CHIP 100PF 5% 50V R906 1-249-420-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-426-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V														
R901 1-249-407-11 CARBON 150 5% 1/4W														
R902 1-249-409-11 CARBON 220 5% 1/4W  C11 1-163-131-00 CERAMIC CHIP 390PF 5% 50V  R903 1-249-411-11 CARBON 330 5% 1/4W C12 1-136-157-00 FILM 0.022uF 5% 50V  R904 1-249-413-11 CARBON 470 5% 1/4W C13 1-124-234-00 ELECT 22uF 20% 16V  R905 1-249-415-11 CARBON 680 5% 1/4W C18 1-163-117-00 CERAMIC CHIP 100PF 5% 50V  R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V  R907 1-249-426-11 CARBON 1.8K 5% 1/4W  C22 1-136-157-00 FILM 0.022uF 5% 50V  R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V							*		}		< CAPACITOR >			
R903 1-249-411-11 CARBON 330 5% 1/4W C12 1-136-157-00 FILM 0.022uF 5% 50V R904 1-249-413-11 CARBON 470 5% 1/4W C13 1-124-234-00 ELECT 22uF 20% 16V R905 1-249-415-11 CARBON 680 5% 1/4W C18 1-163-117-00 CERAMIC CHIP 100PF 5% 50V R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-426-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V							•	٠.			· viii iivi i vii · z			
R903 1-249-411-11 CARBON 330 5% 1/4W C12 1-136-157-00 FILM 0.022uF 5% 50V R904 1-249-413-11 CARBON 470 5% 1/4W C13 1-124-234-00 ELECT 22uF 20% 16V R905 1-249-415-11 CARBON 680 5% 1/4W C18 1-163-117-00 CERAMIC CHIP 100PF 5% 50V R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-426-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V							, ,,		n11.	1_162_131_00	CERAMIC CHIR	20025	5%	FAV
R904 1-249-413-11 CARBON 470 5% 1/4W C13 1-124-234-00 ELECT 22uF 20% 16V R905 1-249-415-11 CARBON 680 5% 1/4W C18 1-163-117-00 CERAMIC CHIP 100PF 5% 50V R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-420-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V														
R905 1-249-415-11 CARBON 680 5% 1/4W C18 1-163-117-00 CERAMIC CHIP 100PF 5% 50V R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-426-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FiLM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V							· ·		l					
R906 1-249-417-11 CARBON 1K 5% 1/4W C21 1-163-131-00 CERAMIC CHIP 390PF 5% 50V R907 1-249-420-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V									1					
R907 1-249-420-11 CARBON 1.8K 5% 1/4W C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V									l					
C22 1-136-157-00 FILM 0.022uF 5% 50V R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V	***								C21	1-163-131-00	CERAMIC CHIP	390%5	576	50V
R908 1-249-424-11 CARBON 3.9K 5% 1/4W C23 1-124-234-00 ELECT 22uF 20% 16V			CARBON											
									l					
RODO 1-249-407-11 CARBON 150 5% 1/4W I C28 1-168-117-00 CERAMIC CHIP 100PF 5% 50V														
Head 1 Fig. 1 Augusta 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1 And 1	R909	1-249-407-11	CARBON		150	5%	1/4W		C28	1-163-117-00	CERAMIC CHIP	100PF	- 5%	50 V

### MD-A MD-B

Ref. No.	Part No.	Description			ark.	Ref. No.	Part No.	Description		Re	mark
C31 C32 C72	1-124-234-00 1-124-234-00	ELECT	22uF 22uF	20% 20% 20%	16V 16V 50V	*		MD-B BOARD, COM			- <b></b>
012	1 164 490 11	< CONNECTOR >	TWF .	20%				< CAPACITOR >			
						C11	1-163-131-00	CERAMIC CHIP .	390PF	5%	50V
# CNJ31	1-580-782-11	CONNECTOR, BOAR	D TO BOARD			C12	1-136-157-00		0. 022uF	5%	50V
* CNJ72	1-580-411-11	SOCKET, CONNECT	OR 4P			C13	1-124-234-00	ELECT	22uF	20%	16V
		PIN. CONNECTOR				014	1-136-273-91		75PF	. 5%	630V
* CNP71	1-564-719-11	PIN. CONNECTOR	(SMALL TYPE)	3P		C15	1-164-680-11	CERAMIC	390PF	10%	50V
		< 10 >				C17			27PF	5%	50V
1031	975010602	IC uPC4570G2				C18		CERAMIC CHIP	.100PF	5%	50V
1001	9-139-100-02	10 010401002				C21 G22		CERAMIC CHIP	390PF	5%	50V
		< CHIP JUMPER >				C23	1-136-157-00 1-124-234-00		0. 022uF	5%	56V
		. VIAI JOMILA Z				623	1-124-204-00	Crcol	22vF	20%	16 V
JW1		METAL CHIP		,		C24	1-136-273-91	FILM	75PF	5%	530V
JW51	1-215-296-00		6 5%	1/8W		C25	1-164-080-13		390PF	10%	50 V
JW52	1-216-236-90	·	0 5%			C27		CERAMIC CHIP	27PF	5%	50V
JW53	1-216-296-00			1/8W		C28		CERAMIC CHIP	100PF	5%	50 V
JW54	1-216-296-00	METAL CHIP	0 5%	1/8W		G31	1-124-234-00	ELECT	22uF	20%	167
		< TRANSISTOR >				C32	1-124-234-60	ELECT	22uF	20%	16V
						C33	1-124-234-00	ELECT	22uF	20%	187
Q71	8-729-602-36	TRANSISTOR 28	A1602			C51	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50 V
						C52	1-163-019-00	CERAMIC CHIP	0. 0068uF	10%	56¥
		< RESISTOR >				C53	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
R11	1-218-099-00	METAL CHIP	120K 5% -			C54	1-136-559-11	FILM	0.0047uF	5%	830V
R12	1-216-025-00	METAL CHIP	100 5%	1/10W	İ	C56	1-164-505-11	CERAMIC CHIP	2. 2uF		16V
R13	1-216-100-00		130K 5%	1/10W		C57	1-184-346-11	CERAMIC CHIP	1uF		187
R14	1-216-067-00		5. 6K 5%	1/10W.		C58		CERAMIC CHIP	0.018uF	10%	50 V
R21	1-216-099-00	METAL CHIP	120K 5%	1/10W	-	C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V
R22	1-216-025-00		100 5%	1/10W				< COMMECTOR >			
R23	1-216-100-00			1/10W							
R24	1-216-067-00			1/10W	- 1			CONNECTOR, BOARD			
R31 R32	1-216-033-00		220 5% 220 5%	1/10W 1/10W	ļ			CONNECTOR, BOARD			
NOZ	1-216-033-00	MELAT OUT	220 5%	17 1011				SOCKET, CONNECTO	11		
871	1-218-082-00	METAL RLATE	24K 5%	1/10W				PIN. CONNECTOR ( PIN. CONNECTOR (			
	1-216-081-00.		22X 5%	1/10W		4 OH 11	1-304-713-11	TIM. GUNNEGION !	OWNER LILE)	δr	
	1-216-089-00		47K 5%	1/10W	ŀ			< DIODE >			
R74	1-216-089-00		47K - 5%	1/10W	}			V 0100C 7			
		< VARIABLE RESIS	TOR >			D31	8-719-988-62	DIODE 188355			
					-			< 1c >			
		RES. ADJ, CARBON			i						
		RES. ADJ. CARBON					8-759-106-02	IC uPC4570G2			
_		RES. ADJ, CARBON			. [	2					
		RES, ADJ, CARBON						< CHIP JUMPER >			
- <b>*****</b>	. ***********	******	***********	*****	***	Para	1 040 000 :50	METAL BULB	Δ	4. (4)	
					]		1-216-296-00		0 5%	1/8W	
							1-216-295-00			1/10W	
		•			ļ	JW3	1-216-295-00	· ·		1/10W	
							1-216-295-08			1/10W -	
					j	OHO.	1-216-295-00	METAL PULL	0 5%	1/10W	

### MD-B SW-A SW-B

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description	Remark
JW6	1-216-295-00		0	5%	1/10W			< VARIABLE RESISTOR >	<del></del> -
JW7	1-216-295-00		0	5%	1/10W				
JW52	1-216-296-00	METAL CHIP	0	5%	1/8W	RV11	1-238-012-11	RES, ADJ. CARBON 1K	
JW53	1-216-296-00	METAL CHIP	0	5%	1/8W	RV12	1-238-551-11	RES, ADJ, CARBON 220K	
JW54	1-216-296-00	METAL CHIP	0	5%	1/8W	RV21	1-238-012-11	RES, ADJ, CARBON 1K	
						RV22	₹1-238-551 <b>-11</b>	RES, ADJ, CARBON 220K	
JW55	1-216-296-00	METAL CHIP	0	5%	1/8W	RV71	1-238-016-11	RES, ADJ. CARBON 10K	
JW56	1-216-296-00	METAL CHIP	Û	5%	1/8W				
JW57	1-216-296-00	METAL CHIP	0	5%	1/8W	RV72	1-238-016-11	RES. ADJ: CARBON 10K	
JW58	1-216-296-00	METAL CHIP	. 0	5%	1/8W				
JW59	1-216-296-00	METAL CHIP	0	5%	1/8W			< RELAY >	
JW60	1-216-296-00	METAL CHIP	0	5%	1/8W	RY31	1-515-726-11	RELAY	
JW61	1-216-296-00	METAL CHIP	0	5%	1/8W				
		< COIL >						< COIL >	
		V 6016 7				T51	1-406-419-11	COIL, BIAS OSCILLATION	
L11	1-410-780-11	INDUCTOR	27mH			1		************	*********
L21	1-410-780-11		27mH						
221						*	1-634-841-14	SW-A BOARD	
		< TRANSISTOR	>					********	
Q51	9-799-808-01	TRANSISTOR	2SD1622-	S			3-343-419-01	HOLDER (S SENSER A)	
Q52		TRANSISTOR					9 049 418 91	HACKER (A ACHACH VI	
Q52		TRANSISTOR						< CONNECTOR >	
.071		TRANSISTOR						·	
-0.11	: 123 002 00	:				. * CNP81	1-568-852-11	SOCKET, CONNECTOR 9P	
		< RESISTOR >							
								< 10 >	
R11	1-216-099-00		120K		1/10W				-
R12	1-216-025-00		100		1/10W	1081	8-119-110-03	DIODE NJL5165K-B	
R13	1-216-100-00		130K		1/10W	1		· DECLOTED	
R14	1-216-067-00		5. 6K		1/10W			< RESISTOR >	
R15	1-249-430-11	CARBON	· 12K	5%	1/4W	004	1-249-417-11	04050N 1F EW	1/4W
201	4 040 000 00	METAL AULD	1000	CM	1.71.0H	R84			1/4W
R21	1-216-099-00		120K		1/10W	Kea.	1-249-408-11	CARBON 100 3%	17.444
R22	1-216-025-00		100	5%	1/10W		•	< SWITCH >	
R23		METAL GLAZE	130K 5. 6K		1/10W			SWITCH: >	
R24 R25	1-216-067-00		2. UK 12K	5%	1/10W 1/4W	201	1_674_060_11	SWITCH, PUSH (1 KEY) (STOP)	
RZD	1-249-430-11	CARDON	IZN	974	17.911	1		SWITCH, LEAF (70EQ)	
201	1 015 022 00	METAL AULD	200	EW.	1.710W -	S82 S86		SWITCH, LEAF (HALF)	
	1-216-033-00		-220 220	5%: 5%:	1/10W 1/10W			}*****************	3444444444 <b>4</b>
R32	1-216-033-00		10	5%	1/4W	*******		<b>, , , , , , , , , , , , , , , , , , , </b>	*******
R41	1-249-393-11			5%	1/4W	*	1_694_941_14	SW-B BOARD	
R42	1-249-393-11		10 - 12K	5%	1/10W	*	1-014-041-14	********	
R51	1-210-013-00	MEINT OBIL.	· Itk	JAI	ty lun-				
R52	1-216-075-00	METAL CHIP	12K	5%	1/10W		3-343-419-01	HOLDER (S SENSER A)	
R53	1-216-073-00	METAL CHIP	. 10K	5%	1/10W	.]			
R54	1-216-309-00	METAL CHIP	5. 6	5%	1/10W			< CONNECTOR >	
· R55	1-216-309-00	METAL CHIP	5. 6	5%	1/10W				
R56	1-216-298-00	METAL-CHIP	2. 2	5%	1/10W	1	1-568-852-11	SOCKET, CONNECTOR 9P	
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W	1		<-10 >	
R72	1-215-081-00		22K		1/10W				
R73	1-216-089-00		47K		1/10W	1081	8-719-710-03	DIODE NJL5165K-B	
	1-215-089-00			5%	1/10W	1			
****						1			

### SW-B

Ref. No.	Part No.	Descrip	tion			Remark
		< RESIS	TOR >			
R82 R83 R84	1-249-414-11 1-247-818-11 1-247-834-11 1-249-417-11 1-249-408-11	CARBON CARBON CARBON		580 300 1.3K 1K 180	5% 5% 5%	1/4W 1/4W 1/4W
		< SWITC	H >			
\$82 \$83	1-571-958-11 1-571-281-21 1-571-281-21 1-571-281-21 1-571-281-21	SWITCH, SWITCH, SWITCH,	LEAF LEAF LEAF	(70EQ) (METAL) (REC A)	STOP)	
	1-571-281-21				****	*******

### MISCELLANEOUS

57 71	•		TYPE (19 CORE) TYPE) (9 CORE)	
121	1-638-983-11	MOTOR FLEX	IBLE BOARD	
			HEAD (PB) (DECK A)	
HRPESO	1A-2003-838-A	BASE ASSY.	HEAD (REC/PB/ERASE)	(DECK B)
M901A	X-3359-417-1	MOTOR ASSY	(CAPSTAN) (DECK A)	
M9018	X-3359-417-1	MOTOR ASSY	(CAPSTAN) (DECK B)	
M802A	X-3363-501-1	MOTOR ASSY	(REEL) (DECK A)	
M902B	X-3363-501-1	MOTOR ASSY	(REEL) (DECK B)	

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### ACCESSORIES & PACKING MATERIALS

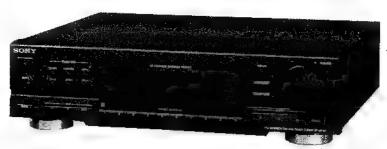
\* 3-350-154-01 CUSH(ON 4-920-940-01 SHEET (A), PROTECTION

### HARDWARE LIST

- #1 7-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S #2 7-685-645-79 SCREW +BVTP 3X8 TYPE2 N-S
- #3 7-621-773-93 SCREW (PANEL 2.6 TP2)
- #4 7-621-775-00 SCREW +B 2.6X3
- #5 7-627-556-08. SCREW +P 2. 6X2. 8

# ST-D709

# SERVICE MANUAL



AEP Model UK Model E Model Australian Model Tourist Model

This set is the tuner section in LBT-A57CD/A57CDM/A67CD/A67CDM/A77CD/A77CDM /D509CD/D559CD/D609CD/D709CD/D759CD.

#### **SPECIFICATIONS**

System

FM tuner section Tuning range

Antenna

Intermediate frequency AM tuner section

**Tuning range** 

Antenna

Intermediate frequency Power requirements

FM stereo

FM/AM superheterodyne tuner

except for EE model 87.5 to 108 MHz

EE model

FM1: 65 to 74MHz FM2: 87.5 to 108MHz 75 ohms unbalanced

300Ω balanced (E, AUS, EA, MY, SP, JE)

10.7 MHz

AEP, UK, G, IT, EE model MW: 522 to 1,611kHz (IT)

531 to 1,602kHz (AEP, UK, G,

LW: 153 to 279kHz (AEP, UK, EE)

E, AUS, EA, MY, SP, JE model

AM: 531 to 1,602kHz (at 9kHz inter-

530 to 1,700kHz (at 10kHz interval)

AM loop antenna

External antenna terminal

450 kHz

AEP, G. IT. EE model

220-230V AC, 50/60Hz

UK model

240V AC, 50/60Hz E, AUS, EA, MY, SP, JE model

120V/220V-240V AC, adjustable with the voltage selector, 50/60Hz Power consumption

AC outlet Weight Dimensions AEP, G, IT, EE model 11W

UK, E, AUS, EA, MY, SP, JE model 10W

2 switched, total 450W max. Approx. 2.7kg (6 lbs)

AEP, G, IT, EE model Approx. 355×95×330mm (14×3<sup>8</sup>/<sub>4</sub>×12<sup>7</sup>/<sub>8</sub> inches)

(w/h/d, including projections) UK, E, AUS, EA, MY, SP, JE model Approx. 355×95×340mm

(14×33/4×131/4 inches

(w/h/d, including proejctions)

Design and specifications are subject to change without notice.

G : German model

• IT : Italian model

• EE : East European model · AUS: Australian model • EA : Saudi Arabia model

• MY : Malaysia model

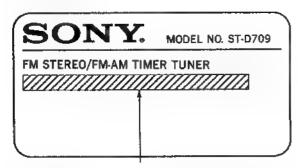
SP : Singapore model

• JE : Tourist model

FM STEREO/FM-AM TIMER TUNER SONY

#### **MODEL IDENTIFICATION**

-Model Number Protion-



AEP, G, IT EE model : AC: 220V-230V~50/60Hz 11W

UK model : AC: 240V~50/60Hz

E, AUS, EA, MY, SP, JE model: AC: 120V/220V-240V~50/60Hz

G: German model
IT: Italian model
EE: East European model
AUS: Australian model
EA: Saudi Arabia model
MY: Mataysia model
SP: Singapore model
JE: Tourist model

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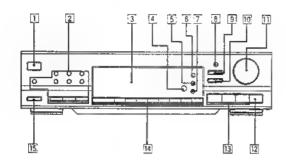
#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## SECTION 1 GENERAL

This section is extracted from instruction manual.

#### 1-1. LOCATION OF CONTROLS

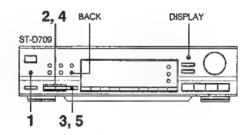


□SYSTEM POWER switch
② Buttons for setting the clock and timer
③ Display window
④ Remote sensor
⑤ STAMUTE button
⑥ CHARACTER button
② MEMORY button
⑤ AUTO TUNING button
⑥ MEMORY SCAN button
1 TUNING knob
② BAND selector
1 SHIFT buttons (A, B, C)

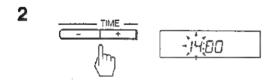
Numeric buttons

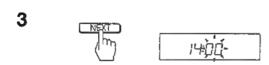
SLEEP button

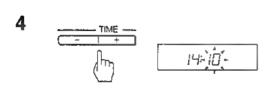
#### 1-2. SETTING THE CLOCK

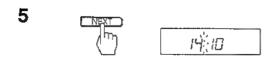


1 CLOCK - DED









The built-in clock shows the time in the display. Set the clock correctly to enjoy timer-activated features (pages 112 and 114).

The time is shown in the 24-hour system.

- 1 Press the CLOCK button.
- Set the hour with the TIME or + button.
- 3 Press the NEXT button.
- 4 Set the minute with the TIME or +
- 5 Press the NEXT button. The built-in clock starts operating.

#### To make corrections

The indication which is blinking can be altered. To make the hour indication blink, press the BACK button.

To reset the clock

Repeat the procedure above.

To switch among the clock time, preset station name and preset frequency display

Each time you press the DISPLAY button, the display changes to give you following information cyclically;

Preset station name

Preset station name

If a power failure occurs

The clock will start running again after the power is supplied. However, since the clock will not run during the power failure, it may be necessary to reset it.

## SECTION 2 ELECTRICAL ADJUSTMENTS

#### Precautions in Repairing

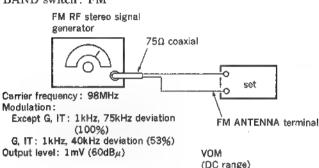
If the front end unit fails, it is difficult to repair the inner circuits, so replace the entire front end unit.

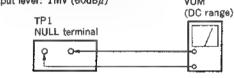
#### FM SECTION

#### FM Discriminator Adjustment (NULL Adjustment)

#### Setting:

BAND switch: FM





#### Procedure:

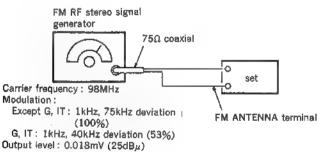
- 1. Tune the set to 98MHz.
- 2. Adjust T21 for 0V reading on the VOM.

**Note:** FM Tuning Level adjustment should be made after FM discriminator alignment.

#### FM Tuning Level Adjustment

#### Setting:

BAND switch: FM



#### Procedure:

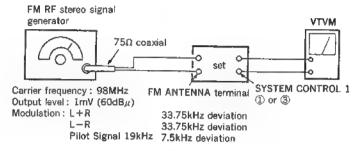
- Tune the set to 98MHz.
- 2. Adjust RV24 so that the TUNED indicator goes on.

G : German model
 IT : Italian model

#### FM Stereo Separation Adjustment

#### Setting:

BAND switch: FM



#### Procedure:

Tune the set to 98MHz.

FM stereo Signal generator Output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	<b>A</b>
R-CH	L-CH	B Adjust RV21 for minimum reading.
R-CH	R-CH	©
L-CH	R-CH	Adjust RV21 for minimum reading.

L-CH Stereo separation: @-® R-CH Stereo separation: ©-®

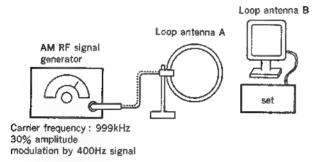
The separations of both channels should be equal.

#### AM SECTION

#### **AM Tuning Level Adjustment**

Setting:

BAND switch: AM or MW

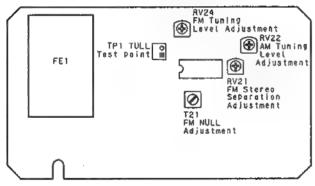


#### Procedure:

- Set loop antenna A so that the loop antenna B input level becomes 58dBµ/m (0.8mV/m)
- 2. Tune the set to 999kHz.
- 3. Adjust the RV22 so that the TUNED indicator goes on.

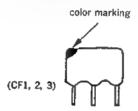
#### **Adjustment Location:**

[TUNER BOARD] - Component Side-



#### Note on Ceramic Filter (CF1, 2, 3) Replacement

This set employs three ceramic filters (CF1, 2, 3) which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by D609, D610 mounted is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



(CF3: G, IT model only)

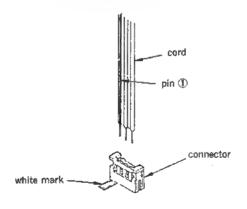
○: Mounted×: not Mounted

Cer	amic filter	Мо	unt	FM intermediate
Color mark	Center frequency (MHz)	* A D610	* B D609	frequency (MHz)
White	10.750	×	0.	10.750
Red	10,700	0	0	10.700
Black	10.650	0	×	10.650

FM intermediate frequency is determined by the three types as shown above. Ceramic filters of same center frequency, i. e., of same color coding should be used for CF1, CF2 and CF3. When replacing the ceramic filters, perform the FM Discriminator Adjustment.

## [Note on Inserting the Cord to the Connector on Tuner Board]

 Insert the cord to the connector fitting Pin ① of the cord in accordance with the white mark on the board at the connector as shown in the figure.



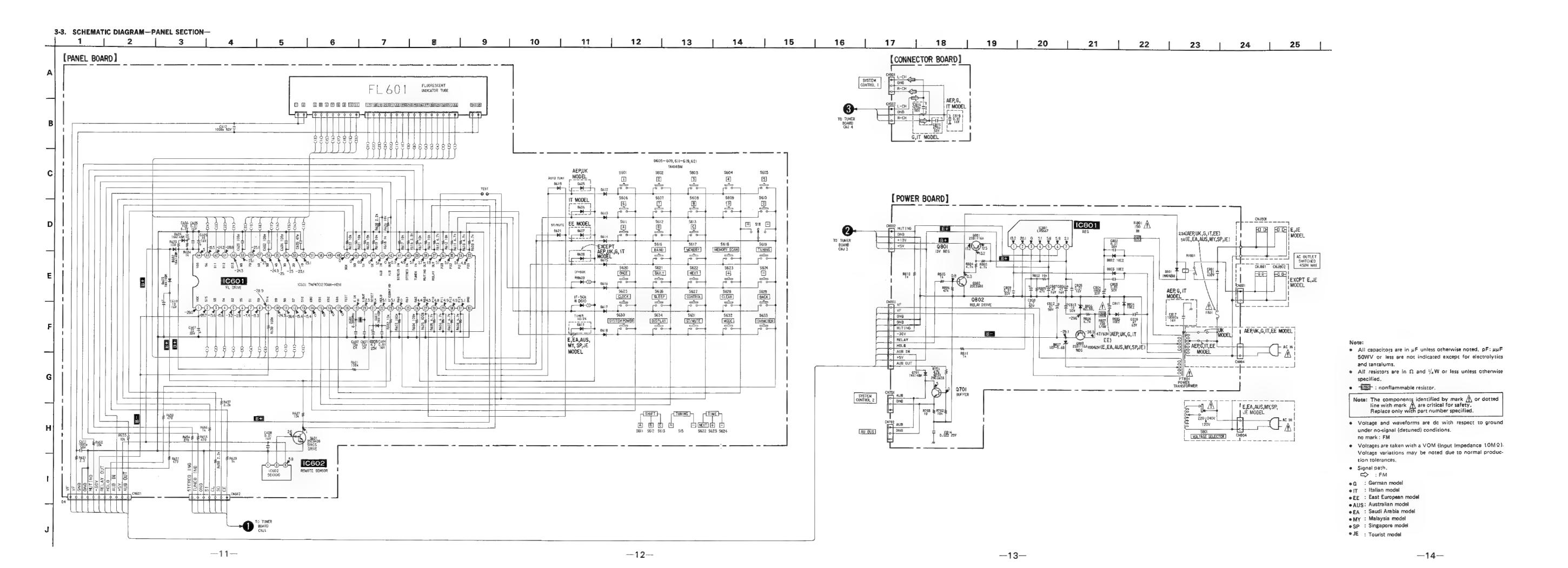
# SECTION 3 DIAGRAMS

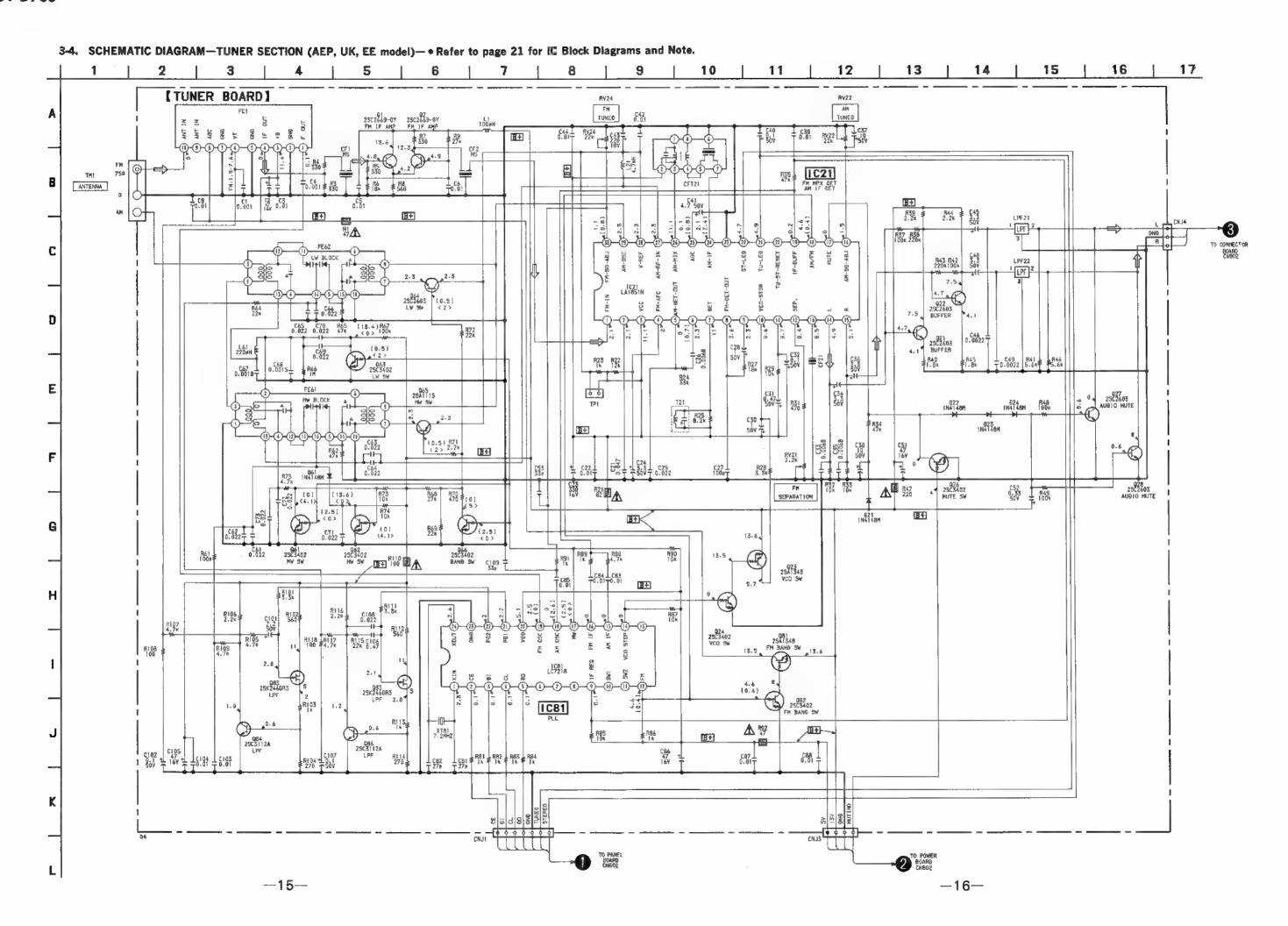
### 3-1. SEMICONDUCTOR LEAD LAYOUTS LA1851N DTA114ES DTC114ES DTC124ES 2SC2603-EF 2SC2669-OY (TOP VIEW) LA5667 2SA1175-HFE **♦®** ⊕ 🖽 2SC2785-HFE 2SC3113-AB letter side LC7218 24 13 <u>enognammeno</u> E C B 2\$B1116A-L (TOP VIEW) SBX1610-59 2SK246-GR3 TMP47C1270AN-H211 S G D HZ\$30-2L (TOPVIEW) cathode -~ anode UZP-5.6B 1N4148M 10E2N \_ cathoda

anode

#### 3-2. PRINTED WIRING BOARDS • Refer to page 6 for Semiconductor Lead Layouts. Semiconductor Location TUNER BOARD TUNER BOARD E, AUS, EA MY,SP, JE model AEP, UK, EE model Ref. No. Location Ref. No. Location Ref. No. Location E, AUS, EA, MY, SP, JE MODEL D21 D22 D23 D24 D-17 D601 H-14 D-17 D-17 D-17 D-14 D22 D-8 D602 1.14 D23 D24 D-8 D603 I-19 D604 D605 D-8 I-14 D61 H-20 IC21 IC81 D606 H-20 IC21 D-15 D607 D608 H-20 H-20 IC81 B-13 Q1 Q2 Q21 Q22 Q23 Q24 Q26 Q27 Q28 Q81 Q82 Q83 Q84 D609 D610 C-4 1-20 C-13 C-5 1-20 C-7 C-13 Q2 Q21 Q22 Q23 Q24 Q26 Q27 Q28 Q61 Q62 Q63 Q64 Q65 Q66 Q81 Q82 Q83 Q84 Q85 Q86 D611 1-18 C-16 C-16 C-14 C-14 E-16 C-17 D-17 C-7 D612 H-20 C-5 C-5 E-7 D613 D614 H-20 H-20 D615 H-20 D-8 D-8 C-5 D616 J-18 D617 J-18 D618 J-18 D-13 D-3 E-13 D-13 C-5 D619 H-18 H-18 E-25 B-3 D621 B-2 D701 D801 C-24 B-23 D-13 D-14 D-13 C-14 C-14 B-12 B-11 C-11 D802 D803 D804 B-23 B-21 TUNER BOARD D805 D806 G, IT model A-21 B-22 Ref. No. Location D807 B-23 D21 D22 D23 D24 IC601 IC602 1-16 VOLTAGE SELECTOR 220-240-120Y L-----H-19 L\_\_\_\_\_\_ IC801 C-26 Q601 I-19 Q701 E-26 Q801 D-25 Q802 C-24 Q803 B-23 E, EA, AUS, MY, SP, JE MODEL IC21 IC81 G-4 Q1 Q2 Q3 Q4 Q21 Q22 Q23 Q24 Q26 Q27 Q28 Q81 Q82 Q83 Q84 H-5 H-5 H-5 FLSOI FLUORESCENT INDICATOR TUBE H-5 H-8 1-8 H-5 H-5 G-3 G-2 • o--- : parts extracted from the component side. • ---- : parts extracted from the conductor side. • G : German model ● IT : Italian model • EE : East European model AUS: Australian model ● EA : Saudi Arabia model MY : Malaysia model ◆SP : Singapore model h-----• JE : Tourist model

-10-

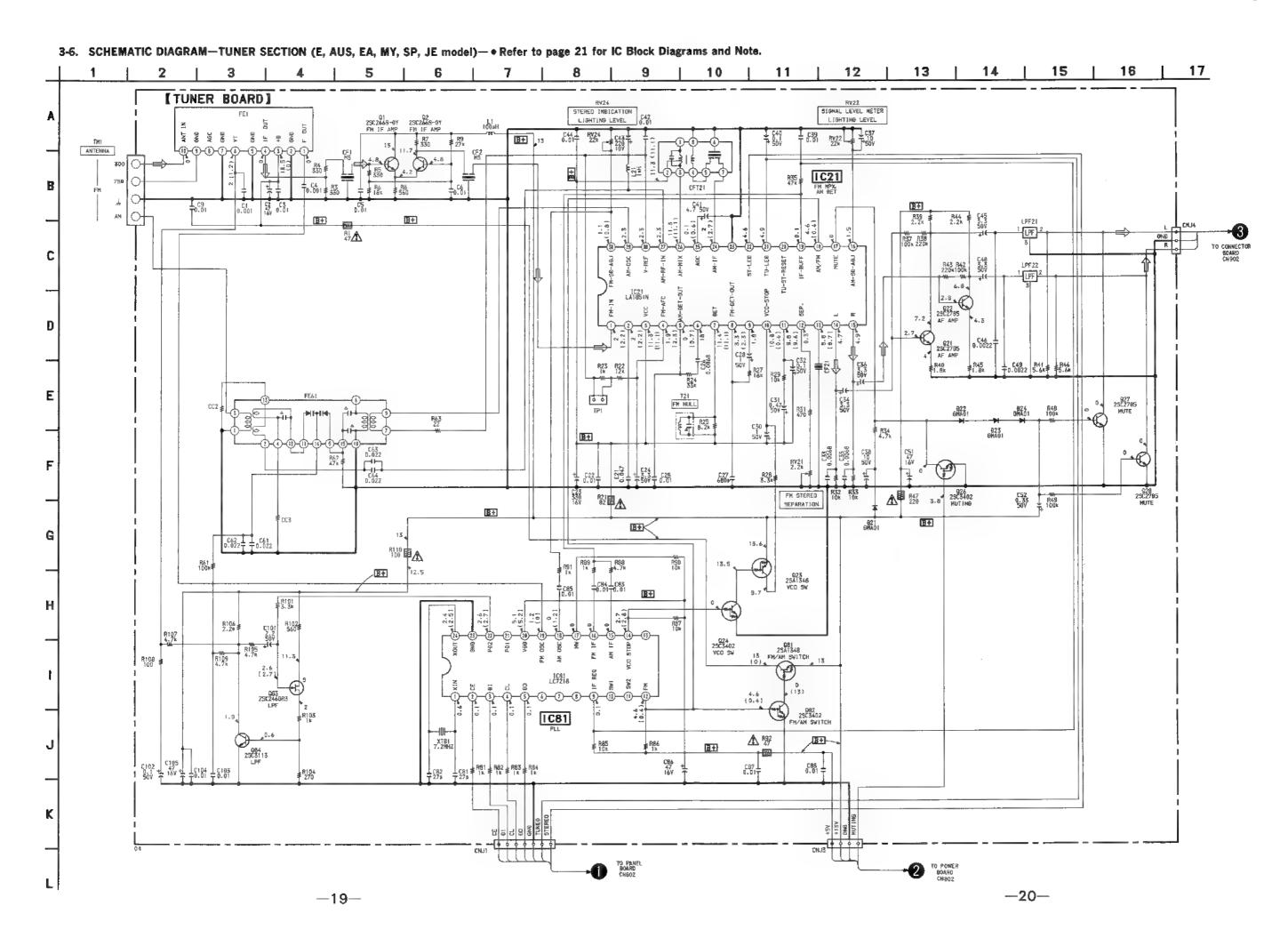




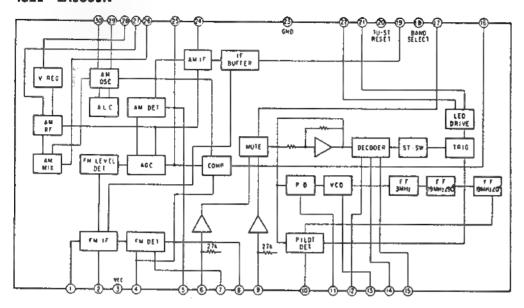
#### 3-5. SCHEMATIC DIAGRAM—TUNER SECTION (G, IT model)— • Refer to page 21 for IC Block Diagrams and Note. | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 7 9 5 ■ ZSC2669 02 ZSC2669 FM 1F AMP FM 1F AMP [TUNER BOARD] 100gH 3+ **RY24** R¥22 FM TUNEÐ AM TUNEE 13.6 1 C39 RV22 1 C37 RV24 GANE GANE GANE GANE HE +B R6 F88 18M ₹ 560 FH ( ) IC21 FM MPX DET AM IF DET L2 100 µH **B+** ANTENNA #12 RF4 ₹330 27k R15 10k B+ $\circ$ R39 2.2k 844 2,2∎ LPF -R37 R38 A. 1912 0,01 + H11 18k CB I R43 R42 C4B 3.3 220k100k 50V LPF22 4.7 027 2902785-HFE BUFFER BUFFER 70,0022 5.6x 5.6k 824 33≒ 1123 C31 0.47 50V + R31 470 ≇ 6 6 027 2502603 AUDIO MUTE 824 R48 184148N 100k R25 F 8.2k 023 IN414BN **B**+ R42 47k ■ 0.022 928 2902603 AUDIO MUTE Q26 HUTE SW R21 1 FH SEPARATION T 0.022 0.33 F49 ▲ 緊 0.022 T T 921 IN4148M B+< R91 Ik ≢ 13.6 C61 0.022 R61 100k≇ R) (a) A 023 0TA114E9 YCO SW ₽101 ₹3.3% 8197 4.7k 074 0TC114ES VCO SW BTALLAES FM BANG SW R109 4.7k R108 -25K244GR3 LPF 4.4 IC81 **⚠** 💖 XTBI 7.2NHZ # R85 10k 2903113AB LPF C86 47 16V 0.01 T 10.0 C87 ↓ 0.01⊤ TO PANEL BOARD CN602 TO POWER BOARD CH802

-17-

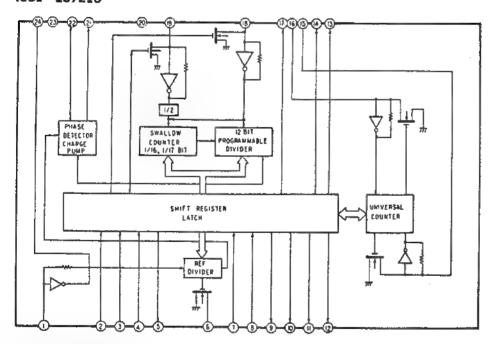
-18-



#### ◆IC Block Diagrams IC21 LA1851N



#### IC81 LC7218



#### Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- \( \Delta \) : internal component.
- : nonflammable resistor.

Note: The components identified by mark A or dotted line with mark A are critical for safety.

Replace only with part number specified.

adjustment for repair.

 Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.

no mark : FM

( ): AM or MW

< >: LW

- Voltages are taken with a VOM (Input Impedance 10M Ω).
   Voltage variations may be noted due to normal production tolerances.
- · Signal path.

⇒ : FM

#### **SECTION 4 EXPLODED VIEW**

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE)... (RED) 1

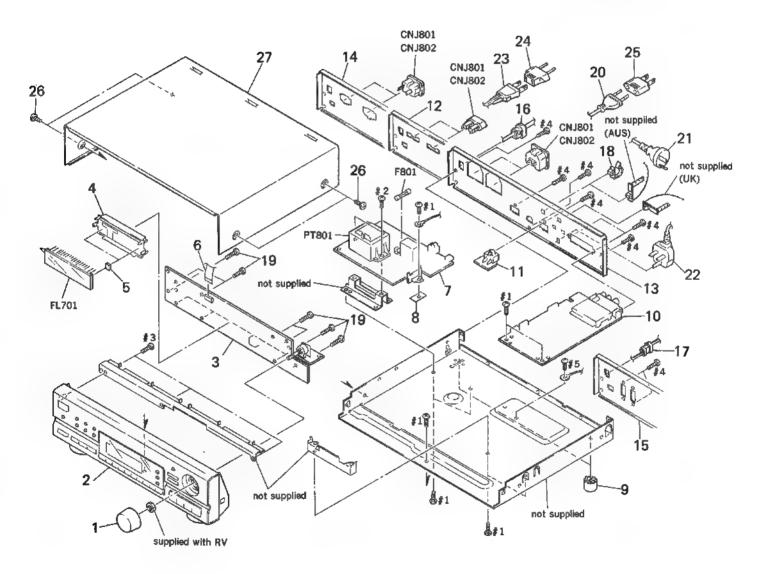
Parts Color Gabinet's Color

• Hardware (# mark) list is given in the last of this parts list.

The components identified by mark A or dotted line with mark. A are critical for safety. Replace only with part number specified.

: German model • G IT : Italian model EE : East European model EA : Saudi Arabia model AUS : Australian model MY : Malaysia model SP : Singapore model

JE : Tourist model



Ref. No.	Part No.	Description	Remark
1	4-930-861-21	KNOB (AEP, E, EE, EA, AUS, MY, SP, JE)	
		KNOB (UK, G, IT)	
		PANEL ASSY (709), FRONT	
		(AEP, E, EE, EA, AUS, MY, SP, JE)	
2	X-4943-452-2	PANEL ASSY (709), FRONT (UK, G, I	(T)
<b>*</b> 3		PANEL BOARD, COMPLETE (AEP)	,
* 3		PANEL BOARD, COMPLETE (EE)	
* 3	A-4360-059-A	PANEL BOARD, COMPLETE (E. EA, AUS, MY, SP. JE)	
* 3	A-4360-066-A	PANEL BOARD, COMPLETE (IT)	
<b>*</b> 3		PANEL BOARD, COMPLETE (UK)	
<b>*</b> 3		PANEL BOARD, COMPLETE (G)	
• <b>4</b>	4-923-103-01	HOLDER, FL TUBE	
• 5	4-921-941-01	CUSHION (FI)	
6	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
* 7	A-4360-052-A	POWER BOARD, COMPLETE (AEP, EE)	
* 7	A-4360-053-A	POWER BOARD, COMPLETE (EA, AUS)	
* 7	A-4360-054-A	POWER BOARD COMPLETE (F.JF)	
* 7	A-4360-055-A	POWER BOARD, COMPLETE (E, JE) POWER BOARD, COMPLETE (UK)	
* 7	A-4360-056-A	POWER BOARD, COMPLETE (G, IT)	
		POWER BOARD, COMPLETE (MY, SP)	
	4-937-354-01		
9	4-931-169-01	FOOT	
• 10	A-4347-288-A	TUNER (3SJ) BOARD, COMPLETE (AB	P. UK)
<b>10</b>	A-4360-063-A	TUNER (2RJ) BOARD, COMPLETE (G,	IT)
* 10	A-4347-287-A	TUNER (2QJ) BOARD, COMPRETE (E, AUS, EA, MY, SP, JE)	
10		TUNER (3UJ) BOARD, COMPRETE (ER	)
<b>1</b> 1	1-647-333-11	CONNECTOR BOARD	
* 12	4-956-867-11	PANEL, BACK (AEP:MADE IN JAPAN,	EE)
× 12	4-956-867-32	PANEL, BACK (G)	
▶ 12	4-956-867-41	PANEL, BACK (IT)	
12	4-956-867-71	PANEL, BACK (EA, MY, SP)	
12	4-956-867-91	PANEL, BACK (EA, MY, SP) PANEL, BACK (AEP: MADE IN FRANCE	)

Ref. No.	Part No.	Description Remark
		PANEL, BACK (UK)
• 14	4-956-867-51	PANEL, BACK (AUS)
* 15	4-956-867-61	PANEL, BACK (E, JE)
* 16	3-703-244-00	PANEL, BACK (E, JE) BUSHING (2104), CORD
		(AEP, UK, G, IT, EE, EA, AUS, MY, SP)
* 17	3-703-571-11	BUSHING (S) (4516), CORD (E, JE)
<b>•</b> 18	4-949-235-01	HOOK (AEP, UK, E, G, IT, EE, EA, MY, SP, JE)
		SCREW (2.6X8), +BVTP
<b>∆</b> 20	1-575-651-11	CORD, POWER (AEP, EE, EA, MY, SP)
<u>1</u> 20	1-575-651-21	CORD, POWER (G, IT)
<u>_</u> 21	1-690-608-11	CORD, POWER (AUS)
1 22	1-696-907-11	CORD, POWER (UK)
<b>∆23</b>	1-575-653-11	CORD, POWER (E, JE)
		ADAPTER, CONVERSION 2P (E3, JE)
<b>A</b> 25	1-569-008-11	ADAPTER, CONVERSION 2P (EA, MY, SP)
26	3-363-099-01	SCREW (GASE 3 TP2)
* 27	4-939-802-31	CASE
<b>∆CNJ801</b>	1-251-078-11	OUTLET, AC. (AUS)
<b>∆CNJ801</b>	1-526-751-00	OUTLET, AC (UK)
<b>∆</b> CNJ801	1-526-794-11	OUTLET, AC (AEP, G, IT, EE, EA, MY, SP)
<u>∧</u> CNJ802	1-251-078-11	OUTLET, AC. (AUS)
<u>∧</u> cnj802	1-526-751-00	OUTLET, AC (UK)
<b>∆CNJ802</b>	1-526-794-11	GUTLET, AC (AEP, G, IT, EE, EA, MY, SP)
		FUSE 2. 5A (UK, G, IT)
<u> </u>	1-532-299-00	FUSE 5A (E, EA, AUS, MY, SP, JE)
<b></b> ₹801 ,	1-576-229-31	FUSE (H. B. C. ) 2. 5A (AEP, EE)
		INDICATOR TUBE, FLUORESCENT
		TRANSFORMER, POWER (E, EA, AUS, MY, SP, JE)
<u> </u>	1-449-979-11	TRANSFORMER, POWER (AEP, UK, G, IT, EE)

### CONNECTOR

### PANEL

#### **SECTION 5 ELECTRICAL PARTS LIST**

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS All resistors are in chas. METAL:Metal-film resistor.

METAL OXIDE: Metal oxide-film resistor. F; nonflammable

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS

In each case, u: µ, for example: uA..: μ.Α.. uPA..: μ.ΡΑ.. uPB..: μPB.. uPC..: μPC.. uPD..: μPD..

CAPACITORS

uF: μF

COILS uH: µH When indicating parts by reference number, please

include the board.

mark A or dotted line with mark. ▲ are critical for safety. Replace only with part number specified.

The components identified by

• G : German model IT : Italian model EE : East European model EA : Saudi Arabia model AUS : Australian model

MY : Malaysia model SP : Singapore model

									JE :	Tourist mo	del	
Ref. No.	Part No.	Description		Re	mark	Ref. No.	Part No.	Descri	ption		Re	mark
*	1-647-333-11	CONNECTOR BOARD				C632	1-162-282-31	CERANI	C	100PF	10%	50V
	2 04, 000 11	******				C634	1-162-282-31			100PF	10%	507
						C635	1-162-215-31	CERAMI	C	47PF	5%	50V
		< CAPACITOR >						< COMN	ECTOR >			
C815	1-164-081-11		476PF	10%	50V	. direct	1 500 054 11			OD 110		
	104 001 11	(G, IT)	470PF	10%	50V		1-568-854-11 1-568-273-11		-			
C816	1-164-081-11	(G, IT)	47000	10%	301	4 CHOUZ	1 300 \$10 11	DOUNLI	, 001111201	01. 11		
C819	1-161-379-00	, . ,	0. 01uF	20%	25V			< DIOD	E >			
		(AEP, G, 1T)				1						
						D601	8-719-987-63		1N4148M	l		
		< CONNECTOR >				D602	8-719-987-63	DIODE	1N4148M	l		
						D603	8-719-987-63	PIODE	1N4148M	l		
* CN901	1-569-625-41	SOCKET, CONNECT	OR 3P (SYS	TEM CONT	ROL 1)	D604	8-719-987-63	DIODE	1N4148M	[		
		SOCKET, CONNECT				D605	8-719-987-63	DIODE	1N4148M	(AEP, UK)		
******	*****	*********	******	******	*****							
						D606	8-719-987-63	DIODE	1N4148N	I (IT)		
*	A-4360-057-A	PANEL BOARD, CO	MPLETE (AE	P)		D607	8-719-987-63	DIODE	1N4148W			
*	A-4360-058-A	PANEL BOARD, CO	MPLETE (EE	)		D608	8-719-987-63	DIODE	1N4148N	I (E, EE, EA, I	AUS, NY, S	SP, JE)
*		PANEL BOARD, CO				D609	8-719-987-63	DIODE	1N4148N	1		
	•	(E, EA, AUS, MY, SP				D610	8-719-987-63	DIODE	1N4148N	1		
*	A-4360-060-A	PANEL BOARD, CO		)								
*		PANEL BOARD, CO				D611	8-719-987-63	DIODE	1N4148N	(E, EA, AUS	, MY, SP, .	JE)
		PANEL BOARD, CO				D612	8-719-987-63	DIODE	1N4148A	1		
	11 1000 002 11	*********				D613	8-719-987-63		1N41481	d		
						D614	8-719-987-63		1N4148)	ı		
	4-021-041-01	CUSHION (FL)				D615	8-719-987-63		1N4148			
•		HOLDER, FL TUBE	,			0010	0 110 001 01	, 51050	27122 241	•		
•	4 359 103 01	TRUDLIN I I TODI	•			D616	8-719-987-63	DIODE	1N4148	4		
		< CAPACITOR >					8-719-987-63		1N4148			
		/ caraction >				D618	8-719-987-63		1N4148I			
Z001	1-162-201-31	CEDAMIC	12PF	5%	50V	D619	8-719-987-6		1N4148I			
.0601			15PF	5%	507	D621	8-719-987-6					
	1-162-203-31				50V	1200	0 119 351 0	DIODE	· LITT TO			
	1-126-163-11		4. 7uF	20%	25V			7 ST D	DESCRIP	INDICATOR >		
	1-161-379-00		0. 01uF	20%	25V			/ : LO	DIEDOENI	INDIAMION >		
C605	1-161-379-00	GERANIC	0. 01uF	20%	ZOY	. El 601	1-519-728-1	TNDIC	ATAD THIRE	FLHODESCE	NT	
	4 400 400 4	F: FOR	4.80E	8.00	* 100	LEDUI	1-319-140-1	L INDIO.	MIVE TUDE,	, FLOORESUE	114	
	1-126-177-11		100uF	20%	10V			/ 10				
	1-124-916-11		22uF	20%	63V			< IC	/			
	1-161-379-00		0. 01uF	20%	25V	10001	0 000 400 4	7 70	mminores	OLU MAA		
	1-126-157-11		10uF	20%	16V		8-759-157-6		TMP47C127			
C610	1-126-157-11	I ELECT	10uF	20%	16V	IC602	8-741-100-4	B IC	SBX1610-5	ä		
C611	1-162-294-31	L CERAMIC	0.001uF	10%	50V			< TRA	NSISTOR >			
C612	1-162-294-31	CERAMIC	0.001uF	10%	50V							
C629			100PF	10%	50V	Q601	8-729-900-3		ramon b	TC124ES		

### PANEL POWER

ief. No.	Part No.	Description	1		R	emark	Ref. No.	Part No.	Descrip	tion		I	Remark
		< RESISTOR	>		_		S605	1-554-303-21	SWITCH.	TACTILE	(5)	-	
							S606						
R601	1-249-441-11	CARBON	1000	5%	1/4%		S607	1-554-303-21					
R602	1-249-429-11	CARBON	10K		1/4W		\$608	1-554-303-21					
R603	1-249-441-11	CARBON	100K		1/49		8609	1-554-303-21					
R604	1-249-441-11		100K		1/4₩		-	1 001 000 =1	OWNER	IDOIRE	(4)		
R605	1-249-425-11		4. 78		1/4₩		S610	1-554-303-21	SWITCH	TACTELE	(0)		
			47 122		-,	•	S611						
R606	1-249-425-11	CARBON	4. 7K	5%	1/4W	F	S612						
R607	1-249-425-11		4. 7K		1/49		\$613						
R608	1-249-425-11		4. 7K		1/4#	-		1-554-303-21					
R609	1-249-425-11		4. 7K		1/4₩		2010	1-334-309-21	OWITON,	IMOTTEE	(DAINU)		
R610	1-249-425-11		4. 7K		1/4W		0017	1 554 900 01	entren	TAMPILE.	/MEMODAY		
1010	1 240 460 11	UNIDON	4. 10.	9.0	1/49	r	S617					1130)	
R611	1-249-425-11	CADBON	4 7V	Εψ	4 /40	е	S618					AN)	
R612	1-249-429-11		4. 7K		1/4W	r	S619						
R613	1-249-425-11		10K	5%	1/49	г	\$620	1-554-303-21	-				
R614			4. 7K		1/4₩	F	S621	1-554-303-21	SWITCH,	TACTILE	(DAILY)		
	1-249-429-11		10K		1/4W								
R615	1-249-429-11	CARBON	10K	5%	1/4W		S622	1-554-303-21				")	
B010	4 040 400 44						S623	1-554-303-21					
R616	1-249-423-11		3. 3K		1/4W	F	S624	1-554-303-21	SWITCH,	TACTILE	(TIME -)		
R617	1-249-429-11		10K	5%	1/4₩		S625	1-554-303-21	SWITCH,	TACTILE	(CLOCK)		
R618	1-249-417-11		18		1/4W	F	S626	1-554-303-21	SWITCH,	TACTILE	(SLEEP)		
R619	1-249-429-11		10K	5%	1/4W								
R620	1-249-429-11	CARBON	10K	5%	1/4W		S627	1-554-303-21	SWITCH	TACTILE	(CONTROL)		
							S628	1-554-303-21	SWITCH,	TACTILE	(CLEAR)		
R621	1-249-429-11	CARBON	10K	5%	1/49		S629	1-554-303-21	SWITCH,	TACTILE	(BACK)		
R622	1-249-429-11	CARBON	10K	5%	1/4\		S630	1-554-303-21	SWITCH,	TACTILE	(SYSTEM PO	WER)	
R623	1-249-405-11	CARBON	100	5%	1/4\	F	S631	1-554-303-21				,	
R624	1-249-417-11	CARBON	1K	5%	1/4W	F					(,,		
R625	1-249-441-11	CARBON	100K	5%	1/4W		S632	1-554-303-21	SWITCH.	TACTILE	(MODE)		
								1-554-303-21					
R626	1-249-429-11	CARBON	10K	5%	1/4₩		S634	1-554-303-21					
R627	1-249-429-11	CARBON	10K	5%	1/4₩			2 401 000 21	07721014	MINITED	(DIDI ME)		
R628	1-249-421-11	CARBON	2. 2K		1/4W	F			< VIBRAT	MH >			
R629	1-249-417-11		1K	5%	1/4W				( TI DIGI	10II /			
R630	1-249-441-11		100K		1/4W		X601 ×	1-579-564-11	VERDATOR	CDVCTA	1 /0 200MI	<sub>m</sub> \	
		01110011	20011	0.4	1/ 111			******				-	
R631	1-249-385-11	CARBON	2. 2	5%	1/6W	F	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		*******		***	******	****
R650	1-249-413-11		470	5%	1/4W			4_42600E9_4	TANKED BY	ARD COM	DIETE /APR	CE)	
R651	1-249-413-11		470	5%	1/4₩		T .	A-4360-052-A					
R652	1-249-429-11		10K		1/41	ı		A-4369-053-A					
R653	1-249-413-11		470	5%	1/4\	P	*	A-4360-054-A				£)	
KUUU	1 743 410 11	GMIDON	410	976	1/4π	t	*	A-4360-055-A					
R654	1-249-410-11	CADROX	270	E0	1 /407	c	*	A-4360-056-A					
			270	5%	1/4W	ľ	*	A-4360-634-A				SP)	
R655	1-249-429-11		10K	5%	1/4₩	P			****	*******	****		
R656	1-249-417-11		1K	5%	1/4W								
R657	1-249-421-11		2. 2K		1/4₩				< CAPACI	TOR >			
R658	1-249-421-11	CARBON	2. 2K	5%	1/4W	F							
							C801	1-161-744-00	CERANIC	(	). 01սF		4007
	•	SWITCH >					C802	1-101-004-00	CERAMIC	(	). 01uF		50V
							C803	1-101-004-00	CERAMIC	-{	). 01uF		50V
<b>S</b> 15	1-571-955-11	SWITCH, ROTA	RY (TUNIN	G)			C804	1-126-105-11	ELECT		L000uF	20%	35V
S601	1-554-303-21 3	SWITCH, TACT	ILE (1)				)	1-161-379-00			). 01uF	20%	25V
S602	1-554-303-21 3	SWITCH, TACT	ILE (2)										
	1 554 000 04 0	SWITCH TACT	TLF (3)				C806 J	1-126-022-11	ELECT		7uF	20%	16V
S603	1-554-303-21												
S603	1-554-303-21 2							1-126-022-11			TuF	20%	16V

### POWER TUNER

Ref. No.	Part No.	Description		R	emark	Ref. No.	Part No.	Description			Rei	mark
C809	1-101-004-00	CERAMIC	0. 01uF		507	R703	1-249-393-11	CARBON	10	5% 1	1/4₩	F
C810	1-124-918-11	ELECT	47uF	20%	E3V	<u> </u>	1-215-864-09	METAL OXIDE	150	5% 1	177	F
C811	1-124-918-11	ELECT	47uF	20%	63V	R802	1-249-429-11	CARBON	10K	5% 1	1/4₩	
		(AEP, UK, G, IT, EE	)			R803	1-249-425-11	CARBON	4.7K	5% 1	1/4₩	F
C811	1-124-572-11		100uF	20%	63V	R804	1-249-425-11	CARBON	4.7K	5% 1	1/4W	F
****	2 202 410 22	(E, EA, AUS, MY, SP,		,	***						,	
C812	1-124-910-11		47uF	20%	50V	R805	1-249-417-11	CARBON	1K	5% 1	1/4₩	F.
5512						R806	1-249-437-11		47K		1/4₩	
C813	1-126-059-11	FLECT	10uF	20%	50V	A R807	1-247-702-11		150	5%	1/4₩	
	1-161-494-00		0. 022uF	2014	25V	R808	1-249-425-11		4. 7K		1/4W	F
	1-161-379-00		0. 01uF	20%	25V	R809	1-249-437-11		47K		1/4W	•
Duir	1 101 070 00	(AEP, G, IT)	0,010			,,,,,,					_,	
		Q201, 0, 11,				R810	1-249-417-11	CARBON	1K	5%	1/4W	F
		< CONNECTOR >					1-249-417-11		1K		1/4₩	
											•	
* CN701	1-569-625-11	SOCKET, CONNECT	OR 3P (SYSTI	EM CON	TROL 2)			< RELAY >				
* CN702	1-565-561-11	PIN, CONNECTOR	3P (AU BUS)									
CN801	1-535-139-00	BASE POST 22MM	(10MM PITCH)	2P		RY801	1-515-617-11	RELAY				
		(EXCEPT E, JE)										
+ CN802	1-568-308-11	SOCKET, CONNECT	OR 4P					< SWITCH >				
* CN803	1-568-830-11	SOCKET, CONNECT	OR 11P									
						<u>∧</u> \$801	1-572-675-11	SWITCH, POWER	VOLTAGE	CHANGE		
* CN804	1-564-321-00	PIN, CONNECTOR	2P					(VOLTAGE SELEC	TOR) (E,	, EA, AUS,	, MY, S	P, JE)
<b>_</b> CNJ801	1-540-041-11	OUTLET, AC (NON	POLAR) (2P)	(AC 0	UTLET)	亦亦由亦申申申	*****	***	*****	******	****	****
		(E, JE)										
						*	A-4347-287-A	TUNER (2QJ) BO		MPLETÉ		
		< DIODE >						(E, EA, AUS, MY, S				
						*		TUNER (2RJ) BO				
	8-719-987-63		ſ			*		TUNER (3SJ) BO				UK)
D801	8-719-987-63	DIODE 1N4148M	l			*	A-4347-290-A	TUNER (3UJ) BO			(EE)	
D802	8-719-200-77	DIODE 10E2N						*****	****	****		
D803	8-719-200-77	DIODE 10E2N										
D804	8-719-200-77	DIODE 10E2N				*		SPACER (A) (G,				
						*		PLATE, SHIELD				
D805	8-719-200-77					*		SHEET (2P) (G,				
<b>D806</b>	8-719-934-22					*	4-924-988-11	PLATE (ST), GF	KOUND .			
D807	8-719-014-66	DIODE UZP-5.6	<b>38</b>					(				
		/ PUOP HOLDED						< CAPACITOR >				
		< FUSE HOLDER >	>			C1	1-162-294-31	CEDAMIC	1006P	Æ	20%	2517
. 50004	. 500 010 11	GOLDED PHOE				C2	1-102-294-31		47uF	_	20%	25V 25V
		HOLDER, FUSE					•		0. 01u			16V
* rnsuz	1-330-213-31	HOLDER, FUSE				C3	1-162-294-31	CERAMIC CHIP	1000P		20% 20%	25V
		/ 10 \				C4		CERAMIC CHIP	0. 01u		20%	167
		< IC >				C5	1-102-038-00	GENAMIC UNIT	0. 010	ir	204	101
TC901	8-759-820-09	TC LARGET				C6	1-169-050-00	CERAMIC CHIP	0. 01u	F	20%	16V
10001	0 133 020 03	10 PUNOL				C7		CERAMIC CHIP	0. 01d		20%	16V
		< TRANSISTOR >				01	1 103 033 00	(G, IT)	0. 010	al.	LUM	101
		/ TRUMBIBION /				C8	1-169-059-00	CERAMIC CHIP	0. 01u	ıF	20%	16V
0701	8-729-620-05	TOANGIGTOD 90	SC2603-EF			00	1 100 000 00	(G, IT)	0.020	**	20/8	141
Q801	8-729-140-04		SB1116A-L			C9	1-163-050-00	CERAMIC CHIP	0. 01u	ıF	20%	16V
Q802	8-729-620-05		SC2603-EF			C21	1-101-006-00		0. 047		204	50V
Q803	8-729-020-03		SB1116A-L			021	1 101 000 00	(EXCEPT G. IT)	v. uti	ult		501
ศักกา	0 740 140 04	TARMOIOTUR Z	PRITION F					(ENVEL U, II)				
						C21	1-161-021-11	CERAMIC	0. 047	hiF	10%	25V
		< RESISTOR >										
		< RESISTOR >				7-1					2014	
R701	1-249-425-11		4.7K 5%	1/49	F	C22		(G, IT) CERAMIC CHIP	0. 010		20%	16V
R701 R702	1-249-425-11 1-249-429-11	CARBON	4.7K 5% 10K 5%	1/49 1/49				(G, IT) CERAMIC CHIP		ıF		16V 16V

The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

### TUNER

Ref. No.	Part No.	Description		R	emark	Ref. No.	Part No.	Description		R	Remark
C24 - C25	1-123-382-00 1-163-063-00	ELECT CERAMIC CHIP	3. 3uF 22000PF	20%	100V 25V	C69	1-163-063-00	CERAMIC CHIP (AEP, UK, EE)	22000PF	-	25V
C25		(AEP, UK, EE) CERAMIC CHIP	0. 01uF	20%	16V	C70	1-163-063-00	CERAMIC CHIP	22000PF		25V
		(G, IT, E, EA, AUS,				C71	1-163-063-00	(AEP, UK, EE) CERAMIC CHIP	22000PF		25V
C26 C27	1-163-019-00 1-162-516-11	CERAMIC CHIP	6800PF 100PF	20% 10%	12V 50V	C72	1 100 000 00	(AEP, UK, EE) CERAMIC CHIP	. GOODODE		arr
V21	102 020 22	(AEP, UK, E, EE, EA			304			(AEP, UK, EE)	22000PF		25V
C27	1-162-521-11	CERAMIC CHIP	680PF	10%	50V	C73	1-163-063-00	CERAMIC CHIP (AEP, UK, EE)	22000PF		25V
		(G, IT)	V0011	10.9	001			(MET, UN, LE)			
C28	1-124-903-11		1uF	20%	50V	C81	1-102-961-00	CERAMIC	27PF	5%	50V
C29	1-216-516-11	CERAMIC CHIP	100PF	10%	50V	C82	1-102-961-00	CERAMIC	27PF	5%	50V
		(G, 1T)				C83		CERAMIC CHIP	0. 01uF	20%	16V
C30	1-124-903-11		1uF	20%	507	C84		CERAMIC CHIP	0. 01uF	20%	16V
C31 -	1-124-902-00		0. 47uF	20%	50V	C85		CERAMIC CHIP			
			0. 4101	204	307	600	1-102-033-00	OCENAMIC CHIP	0. 01uF	20%	16V
C32 .	1-124-463-00	ELECT	0. 1uF	20%	. 50V	C86	1-124-477-11	ELECT	47uF	20%	25V
C33	1-130-481-00	MYLAR	0.0068uF	5%	50V	C87	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	. 16V
C34	1-123-382-00	ELECT	3. 3uF	20%	100V	C88	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	16V
C35	1-130-481-00	MYLAR	0. 0068uF	5%	50V	C101	1-124-925-11		2. 2uF	20%	100V
C36	1-123-382-00		3. 3uF	20%	1007		1-124-463-00		0. 1uF	20%	50V
			Vi Vui	20/6	1001	UIUE	1.124.403.00	EPEAT	o, tur	20%	YUG
C37	1-124-907-11	ELECT	10uF	20%	50V	C103	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	16V
C38	1-124-907-11	_	10uF	20%	50V	C104	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	167
C39	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	167	C105	1-124-477-11	ELECT	47uF	20%	25V
C40	1-124-463-00	ELECT	0. 1uF	20%	50Y	C106	1-136-173-00		0. 47uF	5%	50V
C41	1-124-927-11	ELECT	4. 7uF	20%	100V		••	(AEP, UK, EE)	07 17 41	2.0	901
						C107	1-124-463-00	ELECT	0. 1uF	20%	50V
C42	1-163-059-00	CERAMIC CHIP	0. 01uF	20%	16V			(AEP, UK, EE)			
C43	1-126-176-11	ELECT	220uF	20%	107						
C44	1-163-059-00	CERAMIC CHIP	0.01uF	20%	16V	C108	1-163-063-00	CERAMIC CHIP	22000PF		25V
	1-123-382-00		3. 3uF	20%	1007		1 100 000 05	(AEP, UK, EE)	ZDVVVI I		401
C46	1-161-375-00	CERAMIC	2200P	20%	25V	C109	1-102-963-00		33PF	5%	50V
				20/4	201	0103	1 102 303 90	(AEP, UK, EE)	JJFT	376	304
	1-123-382-00	ELECT	3. 3uF	20%	1907						
C49	1-161-375-00	CERAMIC	2200P	20%	25V			< CARBON MELF >			
C51 -	1-124-477-11	ELECT	47uF	20%	25V						
C52 ·	1-124-252-00	ELECT	0. 33uF	20%	50V	CC2	1-249-366-11	CARBON MELF	0 5%	1/5W	
C53	1-163-105-00	CERAMIC CHIP	33PF	5%	50V			(E. EA. AUS, MY, SP.		27 011	
		(AEP, UK, EE)		-	***	CC3	1-249-366-11		0 5%	1/5W	
								(E, EA, AUS, MY, SP,	JE)		
C54 .	1-101-005-00	CERAMIC (G, IT)	22000PF		50Y			/ CILTED \			
C61	1-163-063-00		22000PF		950			< FILTER >			
	1-163-063-00				25V	ana 1					
		,	22000PF		25V	-		FILTER, CERAMIC			
	1-163-063-00	(	22000PF		25V			FILTER, CERAMIC			
C64	1-163-063-00	CERAMIC CHIP	22000PF		25V			FILTER, CERAMIC OSCILLATOR, CERA			
C65	1-163-063-00	CERAMIC CHIP -	22000PF		25V	01.61	T ONL GIG II	ACAIRTMINE OF US	MI TO		
•		(AEP, UK, EE)			241			/ TOANGEODMED \			
C66	1-163-063-00		22000PF		25V			< TRANSFORMER >			
		(AEP, UK, EE)	manufit (		201	(PPTO 1	1.404_000_44	TRANSCODURA 15 /o	DUTTE C.	i men'	
C67	1-102-120-00 (		0.0040	100	EON	01121	7-404-993-11	TRANSFORMER, IF (C	CHAMIC FI	LTER)	
001			0. 0018uF	10%	50V			( ##NI			
cee in		(AEP, UK, EE)	4 F00DF	0.00-				< CONNECTOR >			
C68 _= :	1-163-011-11 (		1500PF	20%	25V		4 POD 000 41	00411FID ******			
		(AEP, UK, EE)				• CNJ1	1-568-273-11	SOCKET, CONNECTO	K 7P		

### TUNER

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description			Rei	mark
* CNJ3		SOCKET, CONN			Q28	8-729-119-78	TRANSISTOR (E, EA, AUS, MY,	2SC2785-I	HFE		
CNJ4	1-209-209-11	SOCKET, CONN	ECION 3P	j	Q61	8-729-900-80		DTC114ES	(AFP	DK EE)	
		( DIODE )			Q62	8-729-900-80		DTC114ES			
		< DIODE >				8-729-900-80		DTC114ES	,	, ,	
					Q63						P\
D21	8-719-987-63				Q64	8-729-620-05	TRANSISTOR	2SC2603~1	er (a	EP, UK, E	C/
D22	8-719-987-63			1			mp tug koman	0014485	imis /	ATTE CITY	ne\
D23	8-719-987-63				Q65	8-729-119-76		2SA1175-1			EE)
D24	8-719-987-63			į	Q66	8-729-900-80		DTC114ES		, UK, EE)	
D61	8-719-987-63	DIODE 1N41	48M (AEP, UK, EE)		Q81	8-729-900-61	TRANSISTOR	DTA114ES			
					Q82	8-729-900-80	TRANSISTOR	DTC114ES			
		< FRONT END	>		Q83	8-729-202-67	TRANSISTOR	2SK246-G	R3		
FE1	1-463-862-21	FRONT END, F	M (AEP, UK, E, EA, A	AUS, MY, SP, JE)	Q84	8-729-230-93		2SC3113-			
FE1	1-463-857-11	FRONT END (F	M) (G, IT)		Q85	8-729-202-67	TRANSISTOR	2SK246-G	R3 (A	EP, UK, E	E)
FE1			M 3 GANG) (EE)		98g	8-729-230-93	TRANSISTOR	2SC3113-	AB (A	EP, UK, E	E)
FE61	1-236-462-11	ENCAPSULATED	COMPONENT (AEP,	UK, G, IT, EE)							
FE61		ENCAPSULATED (E. EA, AUS, MY	COMPONENT				< RESISTOR >	•			
		(P) DO MON MI	, 51, 01/		ÆR1	1-249-401-11	CARBON	47	5%	1/4W	F
FE62	1-236-463-11	ENCAPSULATED	COMPONENT (AEP,	(IK. EE)			(EXCEPT G, II	")			
1 101	1 250 100 11	BITOTAL COMMITTEE	OVER WHEN CAME		ÆR1	1-249-397-11		22	5%	1/49	F
		< 10 >			74.00	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	(G, IT)			-,	
		10/			R3	1-249-329-11	, .	330	5%	1/8₩	
7001	0 750 001 45	IC LA1851N	d		R4	1-249-329-11		330	5%	1/8W	
IC21	8-759-821-45		Į.		R5	1-249-329-11		330	5%	1/8W	
IC81	8-759-820-91	IC LC7218			กอ	1-249-329-11	(AEP, UK, E, EE				
		< COIL >					(MET, OR, E, EE	i, La, nus, n	11, 121 )	JL/	
		7010			R6	1-249-350-11	CARBON MELF	18K	5%	1/8W	
L1	1-410-645-31	INDUCTOR	100uH		R7	1-249-329-11		330	5%	1/8W	
12	1-410-645-31		100uH (G. IT	1	R8		CARBON MELF	560	5%	1/8W	
1.21	1-407-500-00		4. 7mH (AEP,		R9		CARBON MELF	27K	5%	1/8W	
1.21	1-410-171-11			US, MY, SP, JE)	R10		CARBON MELF	330	5%		(G, IT)
L61	1-410-525-11		220uH (AEP,								
					R11		CARBON MELF	18K	5%	E.	(G, IT)
		< FILTER >			R12		CARBON MELF	330	5%		(G, IT)
					R13	1-249-334-11	CARBON MELF	820	5%		(G, IT)
LPF21	1-235-164-00	FILTER, LOW	PASS		R14	1-249-352-11	CARBON MELF	27K	5%	1/8W	(G, IT)
LPF22	1-235-164-00	FILTER, LOW	PASS		R15	1-249-347-11	CARBON MELF	10K ·	5%	1/8W	(G, IT)
		< TRANSISTO	R >		R16	1-249-343-11	CARBON MELF	4. 7K	5%	1/8W	(G, IT)
					<b>∆R21</b>	1-249-404-00	CARBON	82	5%	1/4W	F
Q1	8-729-230-99	TRANSISTOR	2SC2669-0Y		R22	1-249-430-11	CARBON	12K	5%	1/4W	
Q2		TRANSISTOR	2SC2669-0Y				(EXCEPT G, I'	Γ)			
Q3		TRANSISTOR	2SC2669-0Y (G,	IT)	R22	1-249-431-13		15K	5%	1/4W	(G, IT)
Q4		TRANSISTOR	2SC2669-0Y (G,	,	R23		L CARBON MELF	1K	5%	1/8W	
Q21		TRANSISTOR	2SC2785-HFE	***	1120	2 210 000 2	- Athabat man		*10	-,	
AT.	0 120 110 10	2 Itematator	LDOZ/OO ILD		R24	1-249-353-1	L CARBON MELF	33K	5%	1/8W	
Q22	R790_f10_76	B TRANSISTOR	2SC2785-HFE		R25		CARBON MELF	8. 2K		1/8W	
Q23		TRANSISTOR	DTA114ES		R27	1-249-432-1		18K	5%	1/4₩	
-						1-249-423-1		3. 3K		1/4₩	
Q24		TRANSISTOR	DTC114ES		R28 R29		L CARBON MELF	10K	5%	1/8W	
Q26		TRANSISTOR	DTC114ES	75 (IV A 18) EE)	KZ9	1-749-941-1	L CARDON MELF	TOW	3.6	1700	
Q27	8-729-620-0	5 TRANSISTOR	2SC2603-EF (AE	P, UK, 6, IT, EE)	204	4 040 004 1	CTDDON NO. P	490	En	4 /000	
					R31		L CARBON MELF		5%	1/8W	
Q27	8-729-119-7	B TRANSISTOR	2SC2785-HFE		R32		1 CARBON MELF		5%	1/8W	
		(E, EA, AUS, M			R33	-	1 CARBON MELF		5%	1/8W	
Q28	8-729-620-0	5 TRANSISTOR	2SC2603-EF (AF	EP, UK, G, IT, EE)	R34	1-249-425-1		4. 7K		1/4W	
					R35	1-249-355-1	1 CARBON MELF	47K	5%	1/8₩	

The components identified by mark A or dotted line with mark. A are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Re	emark	Ref. No.	Part No.	Description			Re	emark
R37	1-249-359-11	CARBON MELF	100K	5%	1/8W		R90	1-249-343-11	CARBON MELF	4. 7K	5%	1/8₩	
R38	1-249-363-13	CARBON MELF	220K	5%	1/8W				(AEP, UK, EE, G, IT		0.0	2, 0	
R39	1-249-339-11	CARBON MELF	2. 2K	5%	1/8W		R90	1-249-347-11	CARBON MELF	10K	5%	1/8₩	
R40	1-249-338-11	CARBON MELF	1. 8K		1/8W			1 210 011 11	(E, EA, AUS, MY, SI		9/6	17011	
R41		CARBON MELF	5. 6K		₹ 1/8₩		R91	1-249-335-11	CARBON MELF	1K	5%	1/8W	
		***************************************	DI 011	-	27 011			1-249-401-11		47	5%	1/49	17
R42	1-249-359-11	CARBON MELF	100K	5%	- 1/8W		R101	1-249-341-11		3. 3K			Г
R43		CARBON MELF	220K		1/8W		nivi	1-245-341-11	CANDON MELF	3. 3h	3.76	1/8W	
R44		CARBON MELF	2. 2K		1/8W		R102	1-249-332-11	CADDON MELE	ren	E0	1 /007	
R45		CARBON MELF	1. 8K		1/8W		R102	1-249-335-11		560	5%	1/8W	
R46		CARBON MELF	5. 6K		1/8W					1K	5%	1/8W	
1420	1 245 544 11	. Oznibon mijet	0. UIV	0.40	1/011		R104	1-249-328-11		270	5%	1/8₩	
ÆR47	1-249-409-91	CADDON	220	5%	1 /49	T.	R105	1-249-343-11		4. 7K		1/8W	
R48	1-249-359-11		100K		1/4₩	ţ	R106	1-249-339-11	CARBUN MELF	2. 2K	5%	1/8W	
R49		CARBON MELF			1/8W		DIAT	4 840 040 44	ALDRAU LEUR		eften :		
R61			100K		1/8W		R107	1-249-343-11		4. 7K		1/8W	
		CARBON MELF	100K		1/8₩		R108	1-249-323-11		100	5%	1/8W	
R62	1-249-355-11	CARBON MELF	47K	5%	1/8₩		R109	1-249-343-11		4. 7K		1/8₩	
Ben	1 040 045 44	OADDON INVE	0.00	Par	a tem				(AEP, UK, E, EE, EA		, .	. *	
R63	1-249-315-11		22	5%	1/8W		<u>∧</u> R110	1-249-405-11		100	5%	1/4W	F
D0.4	4 040 004 44	(E, EA, AUS, MY, SP,					R111	1-249-341-11		3. 3K	5%	1/8W	
R64		(AEP, UK, EE)	22K	5%	1/8W				(AEP, UK, EE)				
R65	1-249-355-11		47K	5%	1/8₩		R112	1-249-332-11	CARBON MELF	560	5%	1/8W	
		(AEP, UK, EE)							(AEP, UK, EE)				
R66	1-215-493-00	METAL	1M	5%	1/4W		R113	1-249-335-11	CARBON MELF	1K	5%	1/8W	
		(AEP, UK, EE)							(AEP, UK, EE)				
R67	1-249-359-11	CARBON MELF	100K	5%	1/8W		R114	1-249-328-11	CARBON MELF	270	5%	1/8W	
		(AEP, UK, EE)							(AEP, UK, EE)				
							R115	1-249-351-11	CARBON MELF	22K	5%	1/8W	
R68 -	1-249-352-11	CARBON MELF	27K	5%	1/8W				(AEP, UK, EE)			-,	
		(AEP, UK, EE)					R116	1-249-339-11		2. 2K	5%	1/8W	
R69	1-249-351-11	CARBON MELF	22K	5%	1/8W				(AEP, UK, EE)			-,	
		(AEP, UK, EE)							, —, , vid ==,				
R70	1-249-331-11	CARBON MELF	470	5%	1/8₩		R117	1-249-343-11	CARBON MELF	4. 7K	5%	1/8W	
		(AEP, UK, EE)				į			(AEP, UK, EE)	20 111	GIQ.	27 011	
R71	1-249-339-11		2. 2K	5%	1/8W		R118	1-249-323-11		100	5%	1/8W	
		(AEP, UK, EE)			-,			1 =10 000 11	(AEP, UK, EE)	100	0.0	1704	
R72	1-249-351-11		22K	5%	1/8W				(inci , on, Eu)				
		(AEP, UK, EE)			2, 0				< VARIABLE RESI	STOR >			
R73	1-249-347-11	CARRON MELE	10K	5%	1/8W		RV21	1_9/1_690_14	DEC 101 CIBRO	10 012	(EVO	DOT C TO	P\
11.0	V 77.0 A31 II	(AEP, UK, EE)	ZUM	1/8	1/0#			1-241-020-11	RES, ADJ, CARBOI RES, ADJ, CARBOI	1 4. ZK	(EXC	eri G, 13 P\	i)
R74	1-249-347-11		10K	E0r	. 1/8W						(u, 1.	1)	
111.4	1 243 347 11	(AEP. UK. EE)	TOR	379	> 1/0W		RV22		RES, ADJ, CARBO		/mman		
R75	1_940_949_11		4 7V	EW.	1 /08/		RV24		RES, ADJ, CARBO				1
R/J	1-249-343-11		4. 7K	5%	. 1/8W		KYZ4	1-238-019-11	RES, ADJ, CARBON	47K	(G, IT)	}	
D04	1 040 000 14	(AEP, UK, EE)	4.11	<b>-</b> 0.	4 (018								
R81	1-249-335-11		1K	5%	1/8W				< TRANSFORMER >				
R82	1-249-335-11	CARBON MELF	1K	5%	1/8W	-							
non	1 040 005 44	MADDAN 1577 T	4.07	ha:	4 5000		T21		TRANSFORMER, DIS				
R83	1-249-335-11		1K	5%	1/8₩	-	T23	1-236-465-11	ENCAPSULATED CON	PONEN'	T (G, ]	IT)	
R84	1-249-335-11		1K	5%	1/8W								
R85	1-249-347-11			5%	1/8W				< TERMINAL >				
R86	1-249-335-11		1K	5%	1/8W								
R87	1-249-347-11	CARBON MELF	10K	5%	1/8₩		* TM1		TERMINAL BOARD ( (AEP, UK, G, IT, EE)		NA)		
R88	1-249-343-11	CARBON MELF	4: 7K	5%	1/8W		TM1		TERMINAL BOARD		NA)		
				5%	1/8W								

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Replace only with part number specified.

### **TUNER**

Ref. No.	Part No.	Description Remark
		< TEST PIN >
* TP1	1-560-060-00	PIN, CONNECTOR 2P
		< VIBRATOR >
		VIBRATOR, CRYSTAL (7. 2MHz)
40707074		
		MISCELLANEOUS
<u> </u>	1-575-666-11	WIRE, FLAT TYPE (11 CORE)
		CORD, POWER (AEP, EE, EA, MY, SP)
<u>1</u> 20		CORD, POWER (G, IT)
<u>^21</u>		CORD, POWER (AUS)
<u>^22</u>	1-696-907-11	CORD, POWER (UK)
<u></u> 1€23	1-575-653-11	CORD, POWER (E, JE)
		CORD, POWER (E, JE) ADAPTER, CONVERSION 2P (E3, JE)
		ADAPTER, CONVERSION 2P (EA, MY, SP)
		OUTLET, AC. (AUS)
<b></b> €CNJ801	1-526-751-00	OUTLET, AC (UK)
		OUTLET, AC (AEP, G, IT, EE, EA, MY, SP)
		OUTLET, AC. (AUS)
		OUTLET, AC (UK)
		OUTLET, AC (AEP, G, IT, EE, EA, MY, SP)
<b>⚠</b> F801	1-532-286-00	FUSE 2. 5A (UK, G, IT)
ÆF801	1-532-299-00	FUSE 5A (E, EA, AUS, MY, SP, JE)
<b></b> ♠F801		FUSE (H. B. C. ) 2. 5A (AEP, EE)
<b>⚠PT8</b> 01	1-449-978-11	TRANSFORMER, POWER (E, EA, AUS, MY, SP, JE)
<u></u> ₱ <b>T8</b> 01	1-449-979-11	TRANSFORMER, POWER (AEP, UK, G, IT, EE)
******	******	语家林家环家老家森雕像水雪店餐师面特容研究都表示的方式方式的方式后来有意味的
	****	· · · · · · · · · · · · · · · · · · ·
		RDWARE LIST
	非非非非非	哈安哈勒哈特哈特哈特哈库哈哈哈哈哈哈特
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S

7-685-647-79 SCREW +BVTP 3X10 TYPE2 N-S

7-685-134-19 SCREW +BTP 2.6X8 TYPE2 N-S

7-685-645-79 SCREW +BVTP 3X6 TYPE2 N-S (UK)

7-621-849-00 SCREW (BV/RING)

The components identified by mark A or dotted line with mark.
A are critical for safety.
Replace only with part number specified.

#2 #3

#4

#5